

WOMEN'S PERCEPTIONS OF DISASTER RESPONSE:
A CASE STUDY IN MOORE, OKLAHOMA

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Abstract: This work is a qualitative case study examining women's perceptions of the effectiveness of disaster preparedness, response, relief, and mitigation after a large tornado in Moore, Oklahoma. Literature on vulnerability to disaster is examined from the perspective of women's issues. The Community Capitals Framework is also used as a conceptual framework to understand the loss and availability of resources. In a state like Oklahoma, natural disasters occur with some regularity, thus further understanding how to prepare, respond, and recover from disasters is essential. This study examines how women were able to locate and utilize the available resources to achieve short term and long term recovery. Semi-structured interviews with women affected by the May 20th 2013 tornado in Moore, Oklahoma were conducted to understand women's specific experiences with the goal of improving flaws in disaster response. Each interview was coded for evidence of inequalities and conceptualized through the Community Capitals Framework. Media issues and evidence of community cohesion emerged as common themes and are discussed through grounded theory. Overall, the evidence suggests that women were able to find adequate resources, but that special consideration should be made for those women who need extra assistance in specific areas.

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CHAPTER I

INTRODUCTION

“There's a climate of that loss in our culture in Oklahoma that goes way back. I think that it's interesting to think about what the cumulative trauma does to this community. Because we had the children who were lost in '95. And then the children that were lost in '99. And then no fatalities I don't think in 2003, but now we have 2013 Moore tornado. But we, we have this expectation I think now that this is who we are. That we're just going to have tragedies that are going to come, and we have become in some ways numb to, to the tragedy.” – Deanna T.

The state of Oklahoma and its communities are no strangers to tragedy, loss, and disasters of all kinds. From the 1995 bombing of the Alfred P. Murrah Federal Building to numerous tornadic events, floods, and wildfires, Oklahomans are well versed in disaster. As Deanna T., a relief worker interviewed for my study, notes, Oklahomans have come to not only accept the occurrence of disasters, but take pride in their resilience. Disaster research has suggested women have unique experiences that influence their ability to prepare, withstand, recover, and mitigate for future disaster events.

The spring of 2013 brought a series of severe storms to the Oklahoma City metropolitan and surrounding areas that soon became the subject of national attention. Of the several tornadoes that touched down across the state between May 19th and May 31st, the May 20th tornado that

tore through the city of Moore was perhaps the most infamous, with weeks of dedicated media attention following the event. After it touched down at 2:56 PM, just west of Newcastle Oklahoma, this EF5 tornado took a path through neighborhoods and businesses, razing two elementary schools and ultimately causing the death of 24 people (National Weather Service 2014). Immediately after the disaster, help from all over the country began pouring in to assist the displaced residents. Recovery would be an extensive process, and it appeared that those affected would have plenty of resources to help. Volunteers and organizations assisted residents for a few hours, a few months, or a year or more. The Federal Emergency Management Agency (FEMA) was deployed to the area after the tornado was declared a major disaster (FEMA 2014). Information in this study examined the extent to which women were able to effectively locate, use, and learn from these resources by analyzing women's unique perspectives in a natural disaster.

My own experiences occurred after an EF5 tornado went through my hometown of Piedmont Oklahoma in 2011. The moment I grabbed my car keys, yelled to my mother that I would be back later, and drove off to find several friends who had been in the path I began to think critically about how a community deals with a disaster of that magnitude. In the months following I had my first experiences and observations on how a disaster is handled in a small community, and began to consider different ways in which people and organizations approached the task.

I began to volunteer for any disaster situations I could, and eventually began working for the Regional Food Bank of Oklahoma as a disaster relief coordinator in Moore after the 2013 tornado. For the next year I worked with a team providing food to those impacted by the storm, and as a woman, became especially interested in the problems other women encountered when moving through the process of preparing and recovering from a tornado. It was this work that led

me to continue my education in the area of disasters, and consider how women are specifically impacted by hazard events such as a large tornado.

Disaster research has long studied the effects of natural disasters on societies and those that live in them. Researchers have examined the vulnerability of populations affected by a disaster in order to ascertain their ability to prepare, withstand and recover from a hazardous event.

Vulnerability literature is essential to understanding the unique ways in which women experience a disaster as women are considered more vulnerable than men in general and a disaster may exacerbate already existing inequalities. For example, women are subject to a disproportional amount of risk from natural and technological hazards, especially when combined with issues of poverty and race. Women are more likely to live in areas of higher risk and have fewer resources available to them to adequately prepare for a disaster. They face more obstacles navigating societal structures necessary for recovery, and have less access than men to essential community capitals. Disasters not only create new issues of vulnerability and inequality, but exacerbate already prevalent inequalities (Always, Belgrave and Smith 1998, Enarson 1998, Fothergill 1996).

Vulnerabilities can be outlined using the seven forms of capitals in the Community Capitals Framework; financial, built, natural, political, human, cultural, and social capital (Flora and Flora 2013). While progress certainly has been made towards understanding vulnerabilities unique to women, more research is definitely needed to effectively assist in future disasters. Similarly, disasters can be examined as an event that impacts the strength of a community, whether for better or worse. In a state like Oklahoma, where large-scale natural disasters occur with regularity, studies like these are especially important to ensure that all those affected are getting the help they need and deserve.

This project studied women's experiences of preparedness and recovery following a major natural disaster. I began by examining current literature on women's inequality and vulnerability in disaster, which typically find that preexisting inequalities place women at a higher risk for negative repercussions in a disaster. These inequalities and vulnerabilities often manifest as economic instability, increased workloads at home and at work, increases of domestic violence, and more. Next, I examined how women interact with the communities in which they live by investigating literature on community cohesion and collective stress. Women's social connections are often key to their ability to withstand disastrous events, and how a community works together can strongly impact what resources are available to their women. Finally, I discussed the Community Capitals Framework as a conceptual framework with which to examine what level and what types of resources are available to women. Considering existing literature, I built upon what we know regarding women in disaster situations by exploring four essential research questions. The first two were initial themes I wished to examine at the start of the study, and the last two emerged as common themes as my conversations with women progressed and were added retroactively. First, I sought to understand what, if any, inequalities women may have had to overcome in order to adequately respond, and how being a woman affected their experience as a whole. Additionally, what resources did women have access to that enabled them to respond in all phases of a disaster, and how did these resources help to care for themselves and their families? Did women witness an increased amount of community cohesion, and did this make a difference in how they were able to respond? And finally, what role did women believe the media had on the whole event?

My goal for this study was to assess women's needs from their perspectives, and what they believe should be done to improve their resiliency to future disasters. To answer these research questions I conducted 16 semi-structured interviews with women in Moore, Oklahoma, in order to understand their experiences. These interviews were transcribed and then coded for issues of

inequality, community capitals, media involvement, and community cohesion. Once done, I was able to analyze patterns of what kinds of problems women had, their level of resources, and their own thoughts on how well they were able to prepare, withstand, and recover from the tornado. In addition, community cohesion emerged as a major theme that heavily influenced the way the women identify with their community, and is added and discussed throughout. Although much work has been done to understand how women experience disaster, few studies have taken an active approach to gain an understanding of what women perceive is inadequate in the recovery process.

Overall, most of the women were able to obtain adequate resources to meet the basic requirements needed to return to their previous lifestyle. All respondents remain affected in some manner but vary on how much the tornado still effects their lives. The lack of adequate financial resources available to the women and their families was a common problem, as well as the level of extra work added on to their already busy lifestyles. Similarly, the women found their roles as mothers and caregivers to be the strongest consideration throughout the whole process. The women's social ties to the community in which they lived also influenced the experiences they had in mostly positive ways. Discussion about the influence of media, especially social media, and an interesting level of pride in a particular community resiliency is also discussed as two major themes brought up by the respondents. To conclude, it appears that the community has done well overall to care for its women, but special considerations must be made for those who lie outside of the normal scope of need associated with a large natural disaster.

CHAPTER II

LITERATURE REVIEW

A disaster can be defined as a hazardous event that causes enough damage that the community must seek help from outside sources to fully recover (Gregg and Houghton 2006). In the case of a large tornado, the disaster itself is not long in duration, but is associated with a lengthy recovery time before normalcy can be restored (Gregg and Houghton 2006). Natural disasters are perceived as “acts of God,” with no blame assigned to individuals or organizations. In these situations, “therapeutic communities” emerge, and people come together to return to normalcy (Freudenburg 1993). Despite the natural aspect of these kinds of disasters, the social, economic, and political outcomes are not completely the fault of nature (Enarson 2000). Indeed, scholars have identified technological disasters caused by the failure of human innovation, such as a large oil spill or nuclear meltdown. Unlike natural disasters, technological disasters are the fault of human failure and blame is more ambiguous than with natural disaster. Because of this, communities often become corrosive and begin to tear apart rather than work together (Freudenburg 1993). Most disasters typically fall somewhere on a continuum in between a natural disaster and a technological disaster, with the failure of human systems exacerbating the effects of a natural disaster, such as seen with Hurricane Katrina (Gill 2007). The type of disaster is important when considering the effects of women’s vulnerability, Community Capitals

Framework, and community cohesion because it is essential in understanding how a community may react to the situation.

WOMEN'S VULNERABILITY

Research on how women are impacted by disasters is a relatively new branch in the disaster research field. Much like other branches of sociological research, knowledge on the impact of disasters focused on men's perspectives in order to establish norms and preparedness, relief, and mitigation techniques (Enarson and Meyreles 2004). In their 2004 article, Enarson and Meyreles seek to understand the historical context of studying women in disasters, especially from an international perspective. This particular branch did not fully establish itself until the early 1990s, and at its conception focused mainly on issues of child care and domestic violence. They also found that internationally, most gender based research focuses on English speaking, developed countries, and in these countries the gender gap is less obvious but still exists. In less developed regions of the world, the gender gap in disaster is considerably wider, most likely because of the already existing rates of poverty, a higher gendered division of labor, economic opportunities, health and emergency service biases, domestic violence, and gendered power. Enarson and Meyreles (2004) conclude by suggesting that gender in disaster be understood through the knowledge of everyday experiences and needs of women and men.

In the context of disaster research, social vulnerability refers to how susceptible groups or individuals are to hazards, and how well and quickly they are able to recover, or the control they have over necessary tools of survival (Cutter and Emrich 2006, Curtis, Mills and Leitner 2007, Barnshaw and Trainor 2010, Cutter et. al. 2008, Enarson 2000). Phillips et. al. (2013), defines social vulnerability as complex power dynamics that place marginalized groups in more difficult

positions for recovery. Often, this depends on resources available to those exposed to hazards and disasters (Akerkar 2007, Richter and Flowers 2010). Curtis, Mills and Leitner (2007) describe the “geography of stress,” explaining vulnerability as a combination of factors such as proximity to hazards, political capital, financial resources, and the structure of the home. Additionally, Curtis et. al. state “that high-risk groups vulnerable to a disaster include those with lower incomes, the very young and the elderly, the disabled, women living alone, and female headed households(2007:316)”. Enarson (2000) also discusses risk society, and argues that risk to disaster can often depend on your access to economic and other resources. Miller and Nigg (1994) classify vulnerability into two models; event vulnerability and consequence vulnerability. Event vulnerability refers to the susceptibility to a hazardous event based on the built environment of the everyday locations for those of lower social status, like women. These areas are less able to withstand a disaster, and those of lower social status suffer more losses than those with higher access to resources. Consequence vulnerability is also influenced by a group’s preexisting social status. Those with fewer resources find it more difficult to recover from the consequences of a disaster, prolonging the disruption caused by the disaster. Women have less access to resources necessary to decrease their vulnerability, and bear disproportional amounts of the damage to their physical and social environments (Curtis et. al. 2007, Richter and Flowers 2010).

Women’s life and health are more in doubt during a disaster (Tobin-Gurley and Enarson 2013, Enarson and Fordham 2001). There is some debate on whether more women or men lose their lives outright in disaster, and it appears that this depends largely on the specifics of the event and if adequate records have been kept. In developing nations, women have shorter lifespans than

men and disasters simply serve to speed up this process. Death rates also depend on the integration of marginalized traits, meaning the lower an individual's status, the more likely an individual is to die in a disaster. Women also have much lower access to health care both before and after a disaster, especially gendered health issues such as access to birth control or care of pregnant women. Additionally, women are more likely to live in poor conditions with the responsibility of children, and so are less able to adequately relocate to safer conditions (Tobin-Gurley and Enarson 2013).

Cutter and Emrich define social vulnerability as "the product of inequalities" (2006:103). In this way, the effects of a disaster cannot be fully understood without an intersectional approach. Intersectionality is defined as the study of the relationship of differences between individuals (such as class, race, and gender) as a whole, rather than as separate factors (Choo and Ferree 2010; Collins 2000). In disaster literature, intersectionality is used to understand risk and vulnerability factors, especially when considering that a higher proportion of women than men live in poverty. Tobin-Gurley and Enarson (2013) refer to this phenomenon as "vulnerability bundling," or the increased vulnerability when related to belonging to more than one at risk population. Liu and Mishna (2014) examined the intersection of poverty and gender in disaster in relation to resiliency factors for women in Taiwan after a major earthquake. Liu and Mishna stated, "poor women often lived in disaster-prone areas due to insufficient economic resources, and were consequently more likely to experience natural disasters and to have more difficulty rebuilding their lives afterwards" (2014:289). Not only do marginalized groups, including women, struggle harder to recover, but they are more likely to be hit by a disaster in the first place (Liu and Mishna 2012, Miller and Nigg 1994, Enarson 1998). Similarly, Enarson (1998)

discusses how certain categories such as gender, age, race, economic resources, and more can work together to increase the vulnerability of those impacted by a disaster. Tobin-Gurley and Enarson (2013) classify gender as a master status that permeates all other life experiences, and that gender stratification, or the unequal distribution of resources and power based on gender, is a significant source of inequality. In this way, gender can be a root cause for vulnerability to a disaster. Moreover, such differences should not only be acknowledged, but integrated into the research process in order to effectively assist those most vulnerable to disasters (Cupples 2007). As with any aspect of social research, individual experience is influenced by a variety of factors including financial status, and poor women are more vulnerable to crises such as disaster (Liu and Mishna 2012).

Women are more likely to report feeling at risk or expect negative outcomes than men, and prepare accordingly (Fothergill 1996, Alway et. al. 1998, Morioka 2014, Tobin-Gurley and Enarson 2013). Tierney (2014) defines risk as the ability of a community or individuals to cope with hazard events when they occur. While researching how health risks from radiation in Fukushima were perceived by mothers and fathers, Morioka (2014) found that women were more likely to perceive crucial health risks because their roles as mothers include concern for family health. Men prioritized their professional work roles over risk concerns, to the extent that women's concerns were largely ignored by men in the community (Morioka 2014). Enarson and Meyreles (2004) discuss how women are more likely to suffer bodily injury, ask for assistance, or seek aid with mental health issues because of the gendered expectations they follow. In fact, masculinity norms can sometimes dictate that men do not react emotionally, or must maintain a certain level of masculine traits (Tobin-Gurley and Enarson 2013).

Predominant gendered social structures play into how women experience a disaster. Research shows that natural disasters serve to reinforce cultural and institutional expectations for the types of activities women perform (Fothergill 1999, Alway, Belgrave and Smith 1998, Cupples 2007). In all stages of disaster, women's familial roles are the most salient. Caring for the well-being of children and other family members comes before all other activities, including work or recovery efforts (Fothergill 1999, Liu and Mishna 2012, Tobin-Gurley 2013). Likewise, recovery related work is often separated along gendered lines. In her study examining women's roles after a major flood, Fothergill (1999) found that women spend a majority of their time cleaning areas of the home generally assigned as the woman's domain, such as the living room and kitchen, while men focused on the outdoor areas and physical structure of the home. Alway et. al.'s findings confirmed this pattern, stating, "women's labor was usually inside the home, in 'women's' space, while men worked on the roofs and in the yards" (1998:183). However, Fothergill (1999) did find some exception to this norm; after the flood, both men and women worked together to clean the "neutral" basement area. The women reported egalitarianism and cooperation with their husbands when working to clean the basement, and expressed desire to continue working together to clean the remainder of the house and property (Fothergill 1999).

Family care is the most salient role women adhere to in all stages of a disaster (Tobin-Gurley and Enarson 2013). Men take more risks than women, so women are quicker to prepare and react to a threat. Women also must spend more time caring for the family's needs in recovery. They spend more time looking for assistance, all while having to pick up more childcare duties as previous situations may no longer be available. Women are also more likely to give up work and stay

home with children if day care or schooling options have been eliminated (Tobin-Gurley and Enarson 2013).

Similarly, women experience more institutional discrimination than men, with political and cultural norms already in existence that work against women. In her study on women attempting to recover from the 2004 Indian Ocean tsunami, Akerkar (2007) finds that preexisting social inequalities prevent women from recovering adequately. She examined the ways in which women seek to recover and what issues they encountered that prevented them from doing so. Many of the women impacted did not have equal rights, such as owning property or access to political capital, and were left without viable resources to recover from the tsunami. Issues of domestic violence, abandonment, and homelessness among women are seen to increase in disasters, such as the 2004 Indian Ocean tsunami (Akerkar 2007, Cupples 2007, Tobin-Gurley and Enarson 2013).

Disasters often break down formal societal structures and women's informal relations come into play to help communities prepare and recover (Enarson and Morrow 1998, Tobin-Gurley and Enarson 2013). Since women are traditionally key players in community building, they are often at the forefront of all stages of disaster, but are less acknowledged in formal disaster coalitions. However, women's involvement in coalition building and community organization is essential to the inclusion of all those affected, not just the more influential groups (Enarson and Morrow 1998).

Economic Access

Women's access to economic resources is a major theme in the literature regarding women's positions in a disaster. In fact, Enarson (2000) expands the discussion of women's economic vulnerability in her working piece on gender in disaster. After a disaster, women's economic insecurity increases (Enarson 2000, Enarson and Fordham 2001). Due to the nature of women's work which often centers on care services, they often lose the necessary resources or proper setting in which to accomplish their work. Women are also unable to leave their dependents, unlike men who can and often do leave after a disaster, which leaves them as the sole caregivers. They are also less entitled to relief aid or programs than men, and any efforts for self-earning opportunities are lost due to the nature of the type of work they do. Women are typically the last to return to work, and the gendered division of labor is often strengthened (Enarson 1998, 2000). However, Enarson (2000) finds that while economic opportunities decrease for women after a disaster, their workload is often increased. This increase can be due to the type of organizational and caregiving work that is established throughout the disaster cycle, as well as their main role of caregivers (Enarson 2000). Given all of these factors, women recover much more slowly than men from the economic loss caused by a disaster.

Women can find more opportunity to become a key player in their communities after a disaster than they may have had before a disaster (Enarson and Morrow 1998, Fothergill 1999). Because informal networks are essential to disaster recovery, and women operate heavily in such informal networks, they are able to gain more leadership opportunities than they may have previously. Women typically take charge of preparation activities that relate to the family, and focus more on planning and organizational strategies (Tobin-Gurley and Enarson 2013). However, women

cannot achieve this without significant effort. Enarson and Morrow (1998) discuss the establishment of the organization *Women Will Rebuild* after Hurricane Andrew devastated Miami in 1992. This organization was a direct response to the organization *We Will Rebuild* that was thought to ignore the issues facing women, minorities, and the poor. By using their social connections, the women were able to establish a more equal representation in their community, a pattern which has since been more easily replicated (Enarson and Morrow 1998).

COLLECTIVE STRESS, THERAPEUTIC COMMUNITIES, AND THE STATE OF EMERGENCY

Initial research on disaster and the effects of disasters on communities quickly refuted the idea that wide spread panic and disorder occur after a disaster. In fact, early writings found that a “therapeutic community” emerges after a disaster, and the community is actually strengthened and brought together with the common goal of rescue and recovery (Fritz 1961, Freudenburg 1993). Barton (1969) adds to the literature with the idea of collective stress, an event in which whole social systems are faced with a disruption of normal life conditions, such as that which occurs after a large natural disaster like a tornado. Collective stress serves to create an “emergency social system” that is defined as one of a more altruistic nature, with the community becoming one defined by helping and overcoming an obstacle together (Gillespie 1988). Rather than working independently for personal interests, a therapeutic community works for the benefit of the whole by working towards common interests and striving to make sure every individual in the community is considered (Fritz 1961, Barton 1969). In fact, Barton (1969) initially believed that a social unit could be changed for the better after the collective work of recovering from an event such as a disaster.

Unfortunately cohesive behavior does not occur in all disasters. Technological disasters are considered to have human causes, and the resulting process of victimization and litigation separates groups into a more “corrosive community,” resulting in negative and damaging relationships among an affected population (Picou, Marshall, Gill 2004). Natural disasters, such as the one in Moore, typically see a more therapeutic reaction because there is no one specific to blame, and everyone simply works together to move on. However, there is some debate as to the extent that this kind of behavior occurs. Olson and Drury (1997) find that the therapeutic community only lasts for the initial emergency period following a natural disaster, and then the community begins to disagree on a more political level. The state of emergency allows people to come together, but inevitably communities begin to be separated by differing opinions on how long term recovery and mitigation should look (Olson and Drury 1997).

In this study, a level of community cohesion emerged as a theme throughout conversations with the women of the community. As a community that had previous experience with a similarly sized tornado, the women involved spoke of their ability to recover together with a certain amount of pride. Community cohesion was an important aspect for how Moore identifies as a community because of their ability to work together to recover. Given this, this study will further examine the importance of this phenomenon to women’s abilities to find and use resources throughout the entire disaster cycle.

Disaster Subculture

Research on disaster has identified and explained the occurrence of a disaster subculture. Hayim Granot (1996) outlines the existence and importance of a disaster subculture by first defining subculture. In this context, a subculture is considered to be any culture that deviates from the

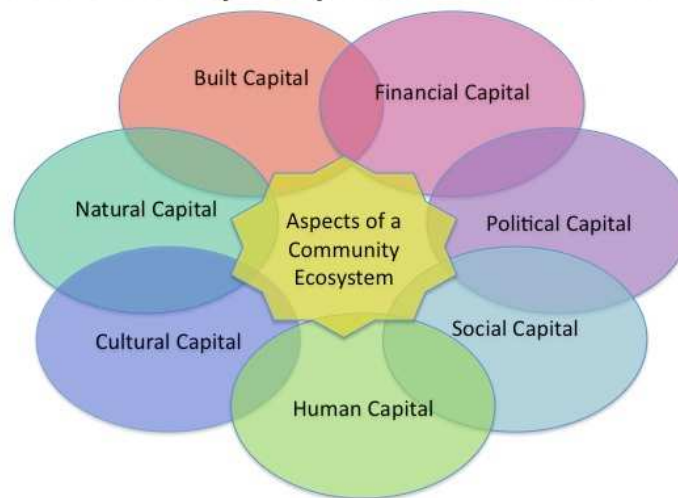
norm of society. The norm of overall society tends to be one without disaster, so the recurrence of specific types of disaster in a certain area creates a subculture of disaster. A disaster subculture exists when a certain area has experienced several disasters and so has molded its cultural understanding and actions to be able to respond to the common occurrence of a disaster (Granot 1996, Engel et. al. 2014). Granot (1996) identifies specific characteristics required to become a disaster subculture: A specific reoccurring threat, specific and pre-established warning systems, certain roles and behaviors enacted as the result of a disaster, adaption of social organizations, transference of detailed skills, and a reduction of trauma when disasters do occur. The evidence supplied by those women who have experienced more than one tornado in Moore points to the existence of a disaster subculture in the community.

Unfortunately, disaster subcultures have a negative impact as well. While a disaster subculture may increase knowledge for coping skills, they can also result in complacency towards a threat, especially if a warning has been given in the past that did not result in a disaster. A disaster subculture can also blind a community to other threats that are not the typical disaster they are prepared for. For example, community members in Moore may spend increased amounts of time and energy preparing for future tornadoes and be caught off guard by a devastating flood (Granot 1996, Engel et. al. 2014).

COMMUNITY CAPITALS FRAMEWORK

FIGURE 1

Community Capitals Framework



Source: Community Capitals Framework & Sustainable Communities, Cornelia Butler Flora, Rural Studies Research Seminar, July 4, 2006, University of Guelph

The Community Capitals Framework (CCF), provides a way of organizing the types of resources available to communities in stages of disaster preparedness, response, recovery and mitigation.

Each of the seven forms of capital, when considered together, can lead to actions and policies that decrease the vulnerability and increase the resiliency of a population (Ritchie and Gill 2011).

Financial capital includes any financial resources, such as income, assets, and credit, and is fairly easy to measure. Built capital includes the physical infrastructure of a community, such as buildings, bridges, roads, and even internet. Natural capital includes the environmental resources important to society, such as air, land, and water. Cultural capital involves the shared experiences of a society that organize the actions of the individuals in a community, such as language,

behaviors, attitudes, worldviews, and meanings. Human capital can be measured by individual's skills, health, specialized knowledge, or physical capacity. Political capital is the position and power individuals have to influence policy and community goals. And finally, social capital is the connections between individuals that allow for an exchange of resources, knowledge, and skills that are essential for disaster preparation and recovery (Flora and Flora 2013, Goreham et. al. 2013, Ritchie and Gill 2011).

Immediately after a disaster, Ritchie and Gill suggest that certain forms of capital are essential to establish a quick and effective recovery, including financial, human, and political capital (Ritchie and Gill 2011). Forms of capital such as financial and built environment are relatively easy to assess and measure, but others such as social and political capital, are much more difficult to measure (Goreham et. al. 2013, Ritchie and Gill 2011). Capital can be lost or gained, and can be taken together to further understand how capital can be restored after it is lost through the use of other forms of capital. One form of capital cannot be considered separately from others but instead considered as a dynamic system that all work together to achieve the necessary goals of disaster response. Women may have very little of one type of capital, but be able to make up for that lack with something else, or have little capital overall, making it more difficult to catch up. In this paper, community capitals are used as a conceptual framework in which to consider how women perceive and experience the resources available to them and what kinds of capital they are able to use to their advantage or lack to their detriment.

Women's vulnerability is affected by the level of pre and post disaster social capital, that is, the social connections and relations (Ganapati 2012). Women have less access to formal recovery efforts after a disaster, and their level of capital can determine how quickly they recover (Akerkar

2007). Increased civic connections can help women recover psychologically and empower them to overcome difficulties in gaining public assistance (Ganapati 2012). In fact, by calling attention to women's social capital, whether in a disaster or not, we can work to improve on women's lives and remove some of the traditional expectations that work against women (Ganapati 2012).

Besides their roles in the family, women also rely heavily upon social, human and cultural capital in order to serve as a link between the community and the family (Alway et. al. 1998, Fothergill 1999). During the cleaning and repairing process, women are more often available to meet repairmen and other specialists at home to get the necessary work accomplished, usually because men return to work earlier (Fothergill 1999). Women are also tasked with establishing connections with relief agencies and services to get the necessary help; they are more likely to wait in line for assistance, and contact the essential legal organizations (Fothergill 1999; Alway et. al. 1998, Tobin-Gurley and Enarson 2013). Unfortunately, many women encounter difficulties working in the more public sphere, especially professional networks largely dominated by men. Some women reported a lack of authority with professions dominated by men, and the men in their lives intervened to get tasks done (Fothergill 1999; Alway et. al. 1998). For example, one woman in Fothergill's (1999) study recalls how her husband was able to use his social connections to hire an electrician, when she was unable to get one on the phone. Despite these difficulties, many women find satisfaction in performing family duties aimed towards recovery (Fothergill 1999).

HOPE FOR CHANGE

Literature has gone to great lengths to address issues of gender in disaster by suggesting and utilizing steps towards evening out the gender inequality present throughout the cycle. To begin

with, women-led organizations and coalitions have a huge impact on bringing awareness to women's and minority's issues (Enarson and Morrow 1998, Tobin-Gurley and Enarson 2013). By partnering with agencies already involved in diminishing women's inequality, disaster response organizations can begin to account for specific issues women face. Tobin-Gurley and Enarson (2013) suggest that "risk mapping" is essential to ensure that all individuals faced by a disaster get the assistance they need. In risk mapping, researchers can identify where population face the most hazards, what problems they would encounter in dealing with them, and take measures to deal with these problems before they become insurmountable (Tobin-Gurley and Enarson 2013). Additionally, gender-specific programs and planning must be implemented to ensure women have access to all they need, especially when it comes to problems only women face, such as reproductive health (Tobin-Gurley and Enarson 2013, Enarson and Fordham 2001).

Kroll-Smith and Couch view disasters as "catalysts for social change" in which society can acknowledge inequities and work to rebuild a stronger and fairer community (1991:357). Researching instances of disaster that may have affected social change can help communities understand how to best mitigate for future events. From this stance, community leaders can use the disaster as a chance to rebuild Moore to not only how it was before the storm, but better for those who live there. Using what is already understood through previous literature, this project will outline women's experiences in recovering from the tornado, the struggles they may have had to overcome, and their perceptions of the effectiveness of aid given. This project will add to current research examining social vulnerabilities that work against women in a disaster setting, as well as everyday life, outlining the potential for positive social change.

What is already understood about how women experience disasters framed data collection and analysis on how a community that has experienced tornadoes in the past responds to the needs of women as a vulnerable population. Women are considered to be a marginalized population worldwide, and are thus more vulnerable to the effects of a natural disaster. They have less power socially, politically, and financially, and are set back farther by damage inflicted on their homes and lives. The Community Capitals Framework can be used to map the level of resources women have available to them in order to recover and prepare. Additionally, the emergence of a cohesive community that works together in some ways, but struggles in others, outlines certain dynamics of a social situation that women must learn to navigate. Women's accounts of what they encountered during a natural disaster are needed to add to the already existing literature.

CHAPTER III

METHODOLOGY

This project was a qualitative case-study of women affected by the May 20th, 2013 tornado in Moore, Oklahoma. Using this approach, I was able to gain insight into how women prepare, respond, and learn from a large natural disaster, as well as their personal perceptions of and experiences from the event. Qualitative methodology was appropriate in this research setting because women were able to recall and share what they found to be important as well as allowed them to share what they found to be important. In this manner, the women I spoke with were able to share what they thought was important for me to know, rather than what I thought was important for them to tell me. A case study presents data from a particular group or person in a particular situation, reducing generalizability, but the findings may be indicative of overarching themes in similar situations and strengthen the importance of individual experience.

In this chapter, I will describe the setting of the tornado using the four disaster phases; preparedness, response, recovery, and mitigation. Next, I discuss how data was collected and organized, including sampling methods. Following, I include an overview of how the data was analyzed before moving on to discuss the findings. Finally, some potential limitations are discussed.

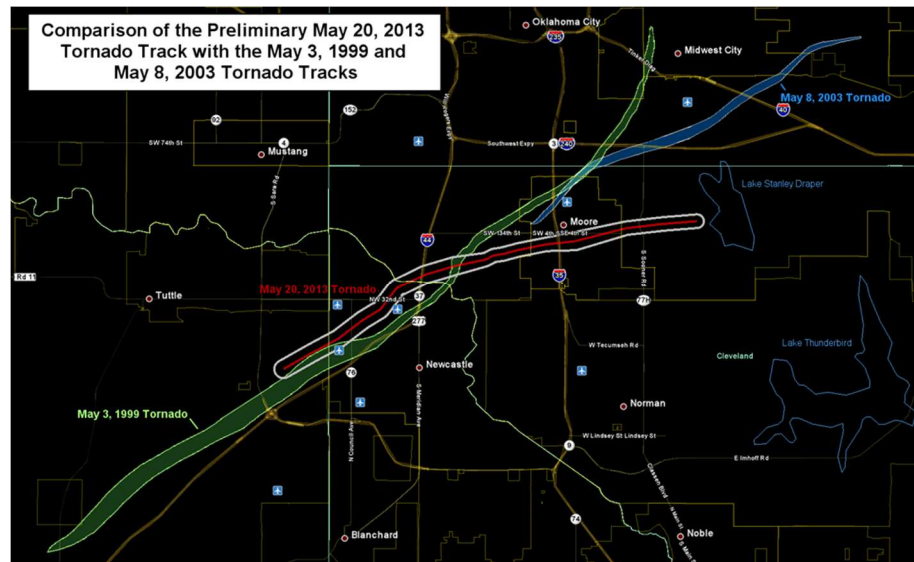
SETTING – MOORE, OKLAHOMA

Moore is an urban city with approximately 58,000 inhabitants, part of the Oklahoma City metropolitan area. A little over half, 51.2%, of the population are women, around 79% white,

with a median household income of \$57 thousand (U.S. Census Bureau 2015). The plight of Moore was highly publicized in 2013 as a heavily urbanized area that was hardest hit by the EF5 tornado. In addition, this tornado was not the first disaster of this scale to hit Moore. On May 3rd, 1999, a large, F5 tornado hit Moore, and the paths of the May 3rd and May 20th tornadoes are remarkably similar, as shown in Figure 1 (National Weather Service 2015). Given this, there is a likelihood that some long-term residents of Moore have been through not one, but two significant disasters.

Although this study did not examine the origins or validity of such claims, it is important to note that Moore is associated with a certain stigma of a high likelihood for a disaster. Many who live there have experienced some form of extreme weather that causes significant damage. Because of this, the cultural construction of Moore includes a heightened awareness for the effects of a disaster and how to respond to them. The National Weather Service of Norman (2014) has recorded 23 tornadoes in Moore since 1875, four of which are classified at F/EF four or five. Additionally, there have been 70 tornado warnings issued for Cleveland County since 1986, and 28 of those warnings have been issued since 2013. Figure 2 shows three of the largest in recent years, including the May 20th, 2013 tornado. This suggests that those who live in Moore are likely to have experienced a tornadic event in the past, and so have some cultural knowledge of how to react.

FIGURE 2



National Weather Service Forecast Office Norman. 2015. "May 20, 2013 Newcastle-Moore Tornado." Retrieved April 23, 2015. (http://www.srh.noaa.gov/images/oun/wxevents/20130520/products_presentation.pdf)

Natural disasters such as the May 20th tornado generally follow a series of phases. Drabek outlines these phases in his 1986 book by elaborating on four major steps: preparedness, response, recovery, and mitigation. The actions of the women in the tornado followed these four steps. In this context, preparedness refers to the plans made in the event of a hazard as well as the warning systems implemented. The National Weather Service in Norman began warning the community of the potential for severe storms as early as the 16th, and continued to do so all throughout the week. Not only did they issue their official warnings with regularity, but they posted on social media and worked with the local news organizations to ensure the warning was spread (NWS Forecast Office Norman 2015). Women and their families that prepared for the storm considered precautions such as packing bags with necessary items, ensuring that they had a safe and accessible place to shelter, remaining vigilant of the activities of each family member throughout the day, and ensuring communication channels were established. In addition, the community itself was put on alert so that emergency personnel were ready to respond with the necessary actions to help the town's citizens.

Response includes the actions taken during and immediately after a disaster strikes. This can include sheltering actions and the emergency response conducted immediately after the disaster. Typically, tornado response actions involve sheltering in place, either in a safe room or in a storm cellar when available. Local businesses typically have a plan for where to shelter their employees and any clients, such as an inside room, bank vault, or basement. In the period between when the storm ends and when official emergency personnel are able to reach the area, neighbors and community members respond to the needs of each other. In Moore, people flocked to the nearby schools that had been hit to help ensure the safety of the students and teachers, as well as checked on their neighbors that may have needed immediate assistance. The response period lasted throughout the day, as emergency crews continued to pull people from debris, care for the injured, and secure the area for any secondary trauma. The residents of the area gathered what they could and left to find shelter, sometimes with the aid of the relief organizations that had already begun to set up in the parking lot of the Warren movie theater on the East side of town, near I-35. In this study, I examined how women prepare, or do not prepare, for such events and the effectiveness of preparedness.

Recovery is the efforts the community makes to return to normalcy, both short-term and long-term. In Moore, recovery efforts began once the immediate threat had passed and those affected were able to begin reassembling their normal lives. Recovery here took months to years for most, and some do not believe that they have fully recovered or in fact, ever will. Recovery is extensive, and can include psychological well-being, a return to work, finding alternative childcare, debris removal, rebuilding, community involvement, and filing paperwork. For a family whose home was destroyed, recovery typically begins with salvaging what they can and removing what they cannot, and continues until a new home has been acquired and essential belongings replaced. For businesses and organizations, this could mean rebuilding or reorganizing for disaster relief efforts. This study discusses women's recovery efforts at length, including the experiences of women who worked for disaster recovery agencies.

Finally, Drabek (1986) discusses mitigation as a method of learning from a disaster and working to decrease the vulnerability of the community and its people. Oklahoma, and especially Moore, is no stranger to large tornadoes. Mitigation techniques intended to diminish the damage inflicted by tornadoes as well as to more speedily respond to their effects have been well-established in the area. Building structure and codes include methods sheltering methods, such as using technology designed to withstand storms when building or including safe rooms or cellars in the design structure. Businesses also prepare for such events by having established emergency plans which their staff must know and follow. However, mitigation is perhaps best understood when it comes to decreasing the vulnerability and risk on a community as a whole. Proper warning systems, access to mitigating resources, and community awareness of its most at risk citizens all work to ensure that a disaster does not have the nearly the detrimental effects it would have otherwise. However, there is still room for improvement, and this study looks at what sort of mitigation techniques are already helpful as well as how they could be improved for future disaster.

DATA COLLECTION

Data was gathered through semi-structured interviews with 13 women and one group interview with three women, throughout the summer and fall of 2015. Initially, participants were to be located through my previous connections with relief organizations still working in the area. However, it became apparent early on that this method of seeking participants would not be as effective as originally thought. Several non-profit organizations or state funded institutions would not allow me to have direct contact with any of their clients for fear of exploiting an already vulnerable population. With that understanding, I asked these agencies to give out my flyer to anyone who was interested in my study as well as posting it someplace public, and most agreed to do so. Some agencies, such as Red Cross or the Regional Food Bank of Oklahoma, reached out to clients who had previously agreed to speak with anyone who wished to hear about their experience, including media, but the clients never made contact. The Oklahoma Disaster Recovery Project (ODRP) was contacted on multiple occasions, but did not agree to allow contact

with their clients for fear that the clients would only participate because they thought it was required to gain assistance. Interestingly, church organizations did not have as many restrictions, and by visiting five or six local churches with flyers and information I was able to locate a handful of participants. Local government organizations whose main purpose was not necessarily disaster relief became a valuable asset. By visiting the Moore City Hall, I was able to make a valuable connection with one member of the staff who then connected me with several other women who were integral members of the community, snowballing from there. This connection as well as visiting local churches turned out to be my most valuable source for participants. In addition to contacting a city stakeholder and several churches, I also utilized social media to request participants, went door to door in the community with flyers, and posted flyers in city centers such as the library, recreational facilities, the Department of Human Services, and the local social security office. By posting to my personal Facebook account and encouraging my contacts to re-post, I was able to reach at least two participants, mainly through contact with mutual acquaintances. In total, I spent approximately five months actively seeking participants and closed data collection.

In total, 16 women participated. According to the U.S. Department of Health and Human Services guidelines, only two participants are living below the poverty line, with one making less than \$11,770 dollars a year for a family of one and the other making less than \$20,090 dollars a year for her family of three, and only two more respondents made less than the Moore's median household income of \$57,000 a year (DHHS 2015). All but three of the 13 women interviewed individually were married at the time of the tornado, and one respondent was divorced between the event and interview. Similarly, all but two of the 13 individual respondents were mothers, and one was also responsible for the care of multiple school children as a teacher. Finally, the participants ranged in age from 26 to 66. An extended description of participant demographics is located in Appendix B.

Thirteen of the interviews were conducted individually with the participant and researcher, and

one interview was conducted as a group with three participants and the researcher. The group interview was conducted together at the suggestion of the 3 participants because they believed it would be more productive. Each participant signed an informed consent form giving permission for the interview to occur as well as permission for the researcher to record the interview. The three women who participated in the group interview also signed an additional stipulation that they would maintain the confidentiality of their fellow participants. The majority of the interviews were conducted in a mutually-selected public place, such as restaurants, coffee shops, or local community centers. Several women were interviewed in their place of work, and one respondent was interviewed in her home. Interviews averaged around an hour long, with the shortest lasting just over a half an hour and the longest (the group interview) just over 2 hours. Each interview varied, but the initial interview guide was used to help structure each interview (see Appendix A).

The women self-identified as affected, meaning that they encountered a wide range of experiences surrounding the tornado. Seven of the women suffered significant damage to their homes, and all needed to temporarily relocate while their homes were fixed or rebuilt, or relocated altogether. Four of the women were integral in the recovery effort as well as future mitigation for the community. Two of the women rode out the storm in a building that was destroyed, surviving in a vault. One participant was a police officer for the community, and was part of the search and rescue efforts. Another was a teacher at Plaza Towers Elementary school, the location of multiple deaths, and took cover with her students in the hallway. And finally, one participant had children in several schools along the path, all of which were safe, but she also received some damage to her home 11 days later during another tornado event.

Measures were taken in order to protect the confidentiality of the women who participated in this study. After signing an initial confidentiality form each woman was given a pseudonym that was used throughout this paper as well as all other related materials. Each was given the option to choose their own pseudonym and if they did not offer a name one was chosen from an online list

of common names. Additionally, each woman had specific ideas about what they wished to keep confidential and so any such information was left out of the transcript and any subsequent documents. For example, several women did not wish to give any demographic information, like their profession, because of how easily any individual reading this paper would be able to identify them, and so all related information was redacted. Alternatively, several women expressed that all the information they were giving was public anyway, and so were not concerned with what details I used.

A Protected Population

At this point, it is necessary to discuss some of the difficulties that quickly became apparent while connecting with women impacted by the tornado. I assumed that my past connections with the area would enable quick contact with any low income, vulnerable populations of women that may be interested in telling their story. However, this did not prove to be the case, and while it presented a problem for reaching an adequate sample, this highlights a potentially strong, well organized protection of vulnerable women.

In the process of finding women to talk with, I approached multiple key relief agencies with a long-term presence in the area. I contacted agencies such as Serve Moore, the Oklahoma Disaster Recovery Project (ODRP), the Regional Food Bank of Oklahoma, and the Long-term Area Recovery Committee (LARC), and all had similar accounts; in order to protect their clients, the best they could do was offer some flyers at the main desk. When pressed, most cited a need to take such precautions because their clients were typically more vulnerable to largely negative media attention as well as scams designed to take advantage of the abnormality of life after a disaster. These organizations worked hard to keep their clients from exposure to further negative reminders of their situation so they could better move on in peace and order. For example, the office of the ODRP has access to client's email, but did not wish to distribute any flyers for fear of clients believing they needed to take part in this study to get further assistance. When told of

the intended target sample, one woman at the LARC commented that it must have proved difficult to find respondents, as neither she nor her colleagues often give out any client information, no matter how well-intended.

While this occurrence makes finding participants for a case study difficult, it speaks to how well the community is already doing by acknowledging and protecting their vulnerable populations. Not only do the organizations and community leaders work to help those who were affected, but they have created a strong, unified front that blocks any potential harm from outsiders. In accordance with efforts made by all the local and outside relief that flooded the area after the disaster, this protection created an environment seemingly as well-suited to assist the affected women. It remains to be seen as to whether this particular sheltering kept any individuals or their families from access to any kinds of information they would have benefited from otherwise.

DATA ANALYSIS

Interviews were audio-recorded with informed consent, and then individually transcribed by the researcher into separate Word documents. Additionally, any field notes written after each interview or during the process of coding were kept in each respondent's file, along with finished transcripts. Once all interviews were transcribed, they were coded according to certain themes. Emerson, Fretz, and Shaw (2011) described this method as focused coding which enables the researcher to examine the document line by line and categorize each with a particular focus of theme that works to answer the research questions. Using this method, three overarching themes were used to organize the codes; Inequalities, Community Capitals, and Community Cohesion. This separation resulted in eighteen codes, all kept in the form of eighteen different Word documents. These codes were built capital, cultural capital, financial capital, human capital, natural capital, political capital, social capital, children, domestic issues, gender roles, motherhood, health, religion, work, media, community, preparedness, and miscellaneous. Some, like financial capital, could be considered for multiple themes, like inequalities and community

capitals. Each transcript was then read line by line, and the relevant line or statement copied into a separate document for each code or codes that it matched with. Once the section of transcript was copied into the code document, it was given a tag for where it came from, when the interview was, and what page on the original document it came from. The original transcripts were not altered. This method of coding allowed for cohesive documents of each code with any relevant data placed for easy analysis. Furthermore, it allowed for lines or sentences to be placed in more than one coding category if necessary.

Emerson et. al. (2011) suggest that field notes and coding documents can be combined to analyze the relationships in the data and draw conclusions on their importance. Using these methods, I compiled the experiences of the respondents in a way that allows me to analyze the effectiveness of actions taken in all four phases of the disaster. With each conversation more information was collected to effectively examine women's experiences in a disaster as a whole. In addition to themes that I examined from the beginning, ideas about community cohesion and media involvement emerged from this study. To utilize this valuable information, I used a grounded theory approach which allowed for the examination of important themes retroactively (Glaser and Strauss 1973). Since many participants wished to discuss how their community came together and what role the media played in the whole event, I began to incorporate a more thorough examination of the literature and theory regarding each aspect.

LIMITATIONS

Since this project is a qualitative case study of one particular event, it is not fully generalizable to all populations. However, the insights and lessons learned by these women certainly help to guide communities and organizations to further account for women's experiences, and provide more thorough mitigation techniques. Since the interviews were conducted two or more years after the actual event, there is some chance of recall bias. Despite this, I believe people will be able to give an accurate account of the disaster and its consequences.

Additionally, sixteen is a small sample size. While significant effort was extended to get more

participants, time constraints and a tight knit community made getting more participants difficult, despite repeated attempts. The community worked together to protect their more vulnerable population, such as women of a lower SES. Despite this, the data gathered from these sixteen women is no less important and provides useful information necessary for the study of women's response to disaster. The community's strength in protecting vulnerable women had the added benefit of providing a real world example for how a well-organized community could do its best to protect its vulnerable populations.

CHAPTER IV

FINDINGS

Conversations regarding women's experiences during the tornado highlight several themes which will be observed throughout this chapter. First, examples of gender inequality are used to answer the research questions regarding what kind of problems women encounter in relation to a disaster. The Community Capitals Framework is then used to organize a discussion on what kind of resources women had, needed, and lost in order to more fully answer the research questions related to what resources were available to women throughout the process. These first two sections are highly related as it is difficult to understand inequality without also understanding resources available to women. However, as the conversations progressed, more themes began to emerge that call for further discussion. Grounded theory, or expounding upon theoretically concepts after examining emergent themes from the data, enabled the examination of the information women brought to the table during their interviews (Glasser and Strauss 1973). Interesting patterns relating to community cohesion developed throughout all of my interviews, and so will be discussed and analyzed. Similarly, the media played a larger role than expected throughout the process, including more technologically dependent forms, such as social media. This section is intended to lay out examples from all four of these themes before beginning a discussion on these same themes.

COPING WITH LOSS - WOMEN'S INEQUALITY

This chapter discusses how the women of Moore, Oklahoma experienced and addressed issues of inequality after the May 20th, 2013 tornado. A potentially vulnerable population was heavily protected from outsiders seeking to exploit their difficulties, however well-intentioned. Despite presenting some difficulties for me, the strength of this protection makes for a compelling case of how well the community took care of its own. However, given the conversations with those affected, it is obvious that women still face a certain degree of inequality after the event. Women are often the main caregivers of children, and motherhood was often the defining role in all phases of the disaster, and so will be discussed. All of the participants expressed some economic difficulty, and several cases are discussed in which the women expressed particular difficulty. While domestic abuse was fairly rare in this particular sample, multiple women still reported encountering negative experiences with a domestic partner, both before and after the tornado, which impacted how well they were able to recover. Women's health, both physical and psychological, was impacted by the tornado and the lingering stress. Similarly, women's positions at work were both strengthened and threatened. Finally, gender roles were examined to understand if traditional gender roles were either strengthened or weakened by the event.

Literature examining how women experience disasters typically centers on social vulnerability, a perspective involving unique inequalities women face. According to this perspective women are already subject to unequal access to resources and life chances and the occurrence of a disaster exacerbates these effects (Curtis et. al. 2007, Richter and Flowers 2010, Fothergill 1996). As shown in a review of the literature, these inequalities have a significant impact on women's ability to cope with and recover from a large-scale natural disaster. Studies have shown that those of lower social status, such as women, are often delegated to live in areas more prone to disaster and have more difficulty overcoming the experience than others. However, what does this look like in a community where natural disasters are considered commonplace, or where

most residents have prior experiences with a tornado? What kinds of inequalities, if any, did women in Moore face before, during, and after the event? What difficulties did women encounter in recovery?

In order to understand what issues women faced, a section of each interview focused on the particular obstacles the women were forced to overcome. They were simply asked what kinds of difficulties they had to overcome, and prompted to discuss issues related to specific vulnerabilities, ranging from concerns and care for children to repercussions of previous domestic violence situations. Given the particular demographics of the sample, most women were not faced with many extraneous difficulties, but report differences in how their husbands, neighbors, or other relatives experienced the tornado. Few expressed any outright instances of discrimination against their sex, but instead tell stories of a strong need and desire to help those they care for while risking their own health and well-being. For those who had children in their care, motherhood was always expressed as their foremost concern and action. Domestic violence was rare in this sample with only two having been affected by it, but the situations of those two had drastic consequences for their status before the tornado that led to particular difficulty in experiencing a complete recovery. Women also report facing more psychological repercussions than the men they knew, and a majority credited fear for their children as the source of this difficulty. Overall, women's expressions of status surrounding the events of May 20th, 2013 are largely positive, and few seemed to believe that their gender was the source of any particular inequalities.

Motherhood

By far, women's biggest concerns were that of their children or the children in their care. While motherly concern does not necessarily indicate an unequal level of parenting, most appear to have taken the largest role in childcare. Dana captures this idea, saying "most moms are the

orchestrators of the daily routines and things like that so not only am I that, I'm absolutely that, I'm also that for the whole city too.” Dana’s role as a mother extended beyond her own children to include the responsibility of the community as a whole. Women’s needs were often neglected until the needs of their children could be secured with varying levels of assistance. Some are single mothers and therefore the only caretakers of the children while others described childcare as their main role in the recovery process. Several women immediately reacted to the obvious need of the school children in their area, rushing to aid in the removal of children from the schools in which they had been sheltering. Although several women reminisced that they would not have been able to accomplish all their roles as caregiver without their husband’s assistance in some way, their children’s needs by far come first.

The inability to see to their children’s needs caused a significant amount of stress for the mothers. Most of the mothers were not with their children at the time of the event. This caused a great amount of fear, since communication was difficult and women had no way of knowing the well-being of their children. Day, a single mother with several school-age children, describes watching in horror from the television in her office as the large tornado headed straight for her children’s schools. Day described her reaction; “I left, I walked out when I saw how close it was and I came here and I got down on my knees and started praying because it was big.” She emerged some time later to the news that the tornado had turned and missed her children’s schools. Other mothers were able to be with their children at the time, but did not feel confident about their safety. Grace, a married mother of two, was able to reach her children at their school and intended to take them home to shelter, but was instead forced to take shelter in the hallway of an elementary school that was hit with her children. She described the experience; “it was like real close to the school, and I thought there's no way, you know, I was like duck down, get on the ground, get on the ground! And so it was, we were still thinking we were gonna get him and go home. Anyway, so that happened and so I just threw myself over the kids and then, and then it

just felt like there was a runaway train.” Though Grace and her family did not have any major physical injuries, Grace suffered from psychological distress in the years to come, caused by the danger to her family. For Grace, her initial thought was for the care of her children, “so after a little bit I thought, ok I guess I need, we can't do anything here and of course I'm in mom mode thinking ok well I need to make decisions that are best for my kids, you know.”

The women I interviewed put their children before the needs of their partners and before their own needs. The respondents worked to shelter their children as best as they could from the effects of the disaster, during and after. Amanda described finding some time to break down emotionally away from her son; “so I think, I don't know that as a mom you really get the space unless you just sort of go by yourself in the shower to just break down.” Casey as well struggled to put her role as a police officer before her role as a mother; “holding that little girl that day.... It.. it.. It broke me out of focus for a minute, I had to, I had to remember that I had to stay focused, I had a job I had to do. And that was hard, not being a mom, being a police officer.” Fortunately, women found immense satisfaction in their role as a mother, and when they could do small things for their children it made them feel better, such as Jaime described:

I'm like, I'll take care of you, and I picked her up and I carried her through there and my feet were soaked, I mean I was soaked really deep cause there had been so much rain with it and I was just like I'm not going to let your feet get wet, I'm going to take care of you baby. And so we carried her, I carried her across there and then, that's just a real vivid moment to me, I'll get my feet wet, you don't have to honey.

Day was a single mother at the time of the storm, and almost all of her stress focused on worrying for the safety of her children.

And then when you can't get to them, it's really, which has happened to me a couple of times. I don't know what to speak to, cause I'm so colored by being a single mom. You

know, I don't know how a woman's experience is different with the dad there, much. But it's just, you know everything is on you all the time, which is manageable but in a crisis or in a storm or whatever, it's just harder. It's harder.

During the event, Day had difficulties reaching her children. With the help of her father, she was finally able to locate all 4 and bring them home safely. Day was not able to speak for what it may be like as a single dad, but she felt that it was much harder to care for the needs of her children as a single mother. Fortunately, Day was able to find solace in talking with her oldest daughter and understanding her experience; “anyway, that was kind of just frankly helpful to me as a mom to see really what she had seen cause she hadn’t really explained it and she really downplayed her role.”

Perhaps the most poignant example of an inability to care for a child’s needs and the stress that it caused arises from Molly’s story. Through a series of misfortunes beginning well before the tornado and culminating in the inability to get adequate resources, Molly was forced to give her young daughter up for adoption when she believed she could no longer care for her.

And I was ok, I was back on my feet, had a good job, had a house, and then all of that happened. And then not qualifying for the resources. [still very emotional] I could maybe manage, if we were living in the vehicle maybe, but babies have to eat. [Tears up, voice cracks] I didn't feel like I could. [Pauses and softly cries].

This example is a striking consequence of the inequalities Molly faced, not only in the aftermath of the tornado, but in the years leading up to the event. As a whole, women are more likely to be single mothers or encounter financial difficulty than men. While the consequences of not having adequate resources do not always end in the loss of a child, this example shows the devastating costs of inequality towards women.

Economic Inequality

Access to economic resources plays a large role in determining women's resiliency to such natural disasters. Having access to savings, adequate insurance, or simply a well-paying job makes all the difference for women and their families. Additionally, women's social support can make a significant impact on the overall cost of recovering, including whether or not she is married. While relief programs are able to help with these economic struggles and losses, women must possess the knowledge of their existence, the time and ability to utilize them, and simply the base qualifications to be permitted. Some women faced many financial difficulties after the tornado, while others very few, creating a stark comparison of just how important economic status can be in these situations.

When a home is damaged or destroyed, women suddenly find themselves without basic everyday items that they and their families need to lead their normal lives. These are often things like clothing, toiletries, furniture, diapers, car seats, and other equipment, not to mention items of sentimental value that are irreplaceable. Some of these items are more important than others but most must be quickly replaced. Moreover, if the tornado has caught them unaware, women often lose their purses or wallets that contain bank cards, credit cards, and identification, effectively cutting them off from their bank account until they can be replaced. Thus the first task is often to replace these items, and this requires having some access to immediate funds before relief can be applied for or insurance collected. Some found this to be a difficult process, having lost identification or cards. Grace, Molly, and Layla all lost their purses in their cars, and while Grace and Layla were able to rely on their husband's information, Molly was forced to rely on donations until she was able to get them all replaced. Similarly, some women did not simply have enough funds to even begin to replace their belongings. Jaime, a married mother of two, described the struggle and embarrassment of going to Wal-Mart in her father's pajamas to buy new clothes, but had enough money on hand to be able to do so. Despite this, Jaime and her

husband needed to replace her husband's Continuous Positive Airway Pressure (CPAP) machine, and were both having difficulties sleeping. This expensive piece of equipment needed to be replaced, and Jaime described the struggle to replace that machine, saying that it "took a lot of phone calls, took a lot of cash. We had to lean on our insurance company to finally get it, to advance us enough to get it."

While insurance was eventually able to help Jaime and her husband, some women did not possess adequate insurance. Natalie and Molly were both renting their homes, and did not have renters insurance, while Tie was reliant upon her then husband for insurance and money because they were entirely under his name, leaving her without aid or funds when they eventually divorced. These women were forced to depend entirely upon the aid of others or their own economic resources to not only replace their destroyed belongings, but find new places to live.

Natalie, a young woman who lived with her boyfriend, did not lose all of her belongings initially, but instead was forced to move when her apartment began to mold from the rain waters that had leaked through the roof and floor. With very little warning from the complex, Natalie and her boyfriend had to find a new place to live, the assistance and cash necessary to make the move, and the funds to replace their irreversibly moldy furniture, all without insurance. At the same time, Natalie began to suffer panic attacks associated with the storm, making it difficult for her to hold a job, so they were forced to rely on one income. She described how they had just barely begun to be ahead of their bills and responsibilities, and were quickly set back by the tornado and mishandling on the account of the apartment complex. Tie and Molly both found themselves single mothers after the storm with no jobs, insurance, home, or much money to speak of. They described the most difficult paths of recovery, and neither believed they fully recovered to this day, nor that they ever fully will. Tie described this in her interview:

No, I still.. like in March, I think it was when we were getting all those tornadoes here. Me and my boys, I live in an apartment now, and the only shelter was the bathroom, so the boys and me would get all of our pillows and stuff and huddle in there. Cause we don't fool around with tornadoes anymore.

Amanda agrees with this sentiment; “I don't think you ever really recover. I think there's always a part of you that is different.”

As with insurance, women's work environments either helped or hindered their process of recovery. Both Tie and Molly lost their jobs because they were too preoccupied by recovery to fully invest in work, and have not found work since. Some were given time off from work in order to begin the recovery process, without any repercussions, and these women seem to appreciate the time given and found it to be very beneficial. Still others decided not to take time off, instead seeking solace in the normalcy associated with continuing to work. One woman, Dana, worked for the city and her job became the overseeing of the city's crisis response. Whereas her own possessions were not affected, she spent long hours working towards the benefit of her community. She found this to be beneficial and satisfying in some ways, but she claimed to have quickly become overextended and exhausted and fears another incident in the near future for which she does not feel she has the strength to address. Dana described how the people of her community gave her the strength to continue when more tornadoes came through the area in the spring of 2015:

I was like eeheh, we're screwed, this isn't going to go very well. And I mean the citizens were the ones that made me feel like we're going to do ok. Usually I'm the one oh guys, we can do this, you know I'm the cheerleader, and we got this! But this last time I'm like oh, we don't got this. We're going down. This is bad. And they were like, oh no. no no no, not us. So I'm like ok, if you guys have it than I have it.

Often women credited the support of family, friends, or community members for necessary financial support. Women whose family or friends lived locally could sometimes find temporary lodging and others homes and so reducing the need to spend money on a hotel or preventing them from needing to stay at a shelter. Jaime found that staying with her parents after the storm was helpful not just because they did not need to find a hotel, but because her parents kept spare clothing and toys for her children, which allowed them to wait until their insurance came through before needing to replace their wardrobes. Social ties also alleviated the cost of cleaning up a destroyed home. When family, friends, and helpful volunteers show up to help remove debris and salvage possessions women are able to reduce the costs of having to deal with such efforts alone. Complete strangers often came to the area to provide food, small goods, or labor. In more long term efforts, most women relied on the exchange of information in their own social circles to point them to the aid that they could continue to get. Grace found information and help through her neighbors:

And so our neighbors were really helpful. They've been through tornadoes before, and they were really helpful. They said ok you need to contact your insurance immediately, you need to tell them that you need, I don't know what they called it, but that you need a stipend or something you know. That you're gonna be staying at your family's house, and they should be giving you money to eat and they'll give you money for clothes. So they helped us, they kind of oriented us, you know, on what we needed to do.

Donna was able to use her social connections to find a safe place for her and her husband to stay for a few days; “so for the next week, well that night we had great friends from church, you know, our Sunday school teacher and his wife called and said, you kids come, well we're not kids but they're older than us and they think we're kids, you know, you come stay with us.”

The knowledge required to take advantage of relief programs was essential, and women who were less connected or lacked the necessary skills required to apply for such help had a more difficult time. Quickly after the storm, a Multi-Agency Resource Center (MARC) was set up in the local high school to provide a more central point of reference for all those seeking aid. Several women were tasked with the job of going to the MARC and talking with each individual organization. For example, Tie was dropped off several times at the MARC while her husband cleaned up the debris so that she could keep the children out of the way while still assisting in the recovery. Tie, and others, describe the frustrating environment of the MARC with its day-long lines and confusion over qualifications. Tie and Natalie both describe being overwhelmed and frustrated by the whole place with very little to show for it. Molly had more difficulty because she was not able to give her full name because of a domestic violence issue. On the other end of the spectrum, one woman, Donna, felt that she was not qualified to receive any assistance because she was too well insured and had a fair amount of savings. Donna, a married woman with grown children, describes how any place she applied for help denied her because they did not believe she and her husband needed it. She had previously believed that they would be able to get assistance because they were among those affected, but that their financial status changed that. “I felt like our financial status, the fact that we had a bigger home than maybe some people, that was our hindrance. That is, that changed the rules of this game for us.” Even though there were women on both extremes, most women appear to have best recovered through a mixture of some financial security, family support, and the aid of relief organizations.

Domestic Trouble

Domestic issues were not particularly prevalent in this sample, and rarely spoken of outright. Only two participants seem to have experienced strong, negative situations with their partner. Unsurprisingly, both have been discussed in previous sections for their lack of adequate resources, most of which seem to coincide with abuse by their husbands. Molly’s troubles began

well before the storm and placed her in a particularly vulnerable situation. Sometime before the disaster, Molly had been in an abusive relationship but had escaped through the assistance of a domestic violence program that allowed her and her daughter to live anonymously away from her abuser. Because of her participation in this program, she was not able to give her name or address to anyone so that he was not able to locate the two of them:

I have a big problem because of this... *shows confidentiality card* Because of the address confidentiality program, I'm not allowed to get my name and my address and stuff on lists of stuff, and unfortunately if you want help from the Salvation Army, your name goes on their list, and their list goes to their everybody on their board.

This situation meant that Molly had already had to start over and had just begun to finally feel settled and get ahead when the tornado hit, sending her back to the start but with the added complication of the confidentiality program. She was eventually able to get assistance from the Red Cross, who provided her with enough credibility to be accepted as a client for ODRP. While this proved to be of significant help, it came too late to allow her to properly care for her young child. In addition, she had had to leave any support system she had previously possessed to escape her abusive relationship, so she had no social ties with which to get much help. As has been previously discussed, this path that began with an abusive partner led to the eventual adoption of her daughter by another family and some serious psychological damage to Molly.

Interestingly, several women report that the stress of the tornado actually served to bring their family closer together. Several women report feelings of relief when discovering that their family was safe, and that they could face whatever came later together. Grace reports her feelings after seeing her husband for the first time after the tornado saying that “in the middle of the chaos, at least my life was at peace, knowing that he was ok, the kids were ok, and knowing that.” While it was difficult, she was optimistic that they would be able to recover together. Grace was not the only

one to report the strength of a partnership. Donna also felt strength in her relationship, stating “I felt like my husband and I were partners in this. It's not like it was me, it was us.” It would appear that any domestic abuse occurred before the disaster and was more influential as a precursor for vulnerability rather than a result of the disaster itself. Although this may be a result of the sample taken, this presents a positive sign of strength of the community impacted by this particular disaster.

Health

Women often suffered negative, long-term health repercussions because of the tornado in addition the initial physical danger they were exposed to. Almost all the women report feelings of extreme stress during the event, whether or not they were in the direct path of the tornado. Few of the women suffered physical injury as a result of the storm, and none suffered long-term disabling injuries, but multiple women have residual psychological distress that they attribute to the disaster. As in all aspects, the health of the women's children and families took priority over their own health and well-being. They each dealt with their own health and psychological issues in different ways with mixed results.

No two women shared the same experience during the event. Each were in a different location, with different people, with different levels of knowledge about where their loved ones were. Some sheltered at work and dealt with the stress of needing to ensure the safety of their patrons before they could make contact with or seek out their own loved ones. Jaime, as the only manager on duty at her workplace, made sure everyone was sheltered properly and safely removed from the building before she was able to take a few moments to break down in the bathroom before going to find her kids. “I finally went into the bathroom you know, I just said I'm going to go use the bathroom before I leave and I just went in there and cried for a minute, it was the first time I had come out of disaster mode at all.” Layla's job as a teacher required that

she stay with her students while they sheltered from the storm. With three children and an adult aide, Layla sheltered in the hallway of one of the destroyed elementary schools. She physically laid on top of one of the children in order to keep the student safe. Layla did not consider her own safety, but was mainly concerned for the security of the children under her care.

Fortunately, she only suffered minor injuries and her students experienced no injuries at all.

Some of the women were forced to shelter where they were with family members. Grace and Amanda both picked up their children early in order to keep them safe, and Tie kept hers home that day. Others were unable to make it to the area to get their children before the storm started, and had to stay put without knowing if their children were safe, sometimes for hours. Dana was in another state for work and got all of her information second hand, and she became incredibly stressed trying to get home and simultaneously learn what had occurred. The women without children also report extreme amounts of stress. Daisy had been making a trip to the bank when the sirens went off, and so sheltered in the bank vault, emerging to wreckage but safe. For Daisy, the most stressful part was being unable to contact her husband immediately after, but reports quickly moving on and recovering emotionally. Those who were not directly affected but worked closely with the relief effort afterwards report being upset and emotional watching the news and feeling like they were unable to do anything to help. Regardless of where the women were or who they were with, all of the women were emotionally affected by the passing of the tornado.

Luckily, none of the respondents suffered major physical injuries, and nothing long-term.

However, most reported feelings of lingering stress. Many took advantage of available counseling for themselves and their families, and seem to have been able to deal with the trauma effectively. Despite available help, several women did not believe they had fully recovered psychologically at the time of the interview. Grace reported occasional panic attacks and depression which she tied back to her fear on the actual day of the tornado. Layla and Casey both witnessed some of the worst destruction and found it difficult to connect with anyone who had

not shared experiences with whom they could vent. They both believed that the biggest difficulty they had with recovering emotionally was their inability to be a part of a group, or return to normal. Many of the women who were involved in the relief effort, especially Dana, experienced significantly increased levels of stress at work after having gone into emergency mode. Dana worked overtime for weeks, sleeping in her office, and is not sure she could ever handle having to do that amount of work again. She, along with others, did not feel that they would have the emotional fortitude to respond to such a large tornado again; “I don't know, I just don't know how many more we can handle, physically or mentally. I'm waiting for that one time that it just, you physically can't do it anymore.”

Women's health, like all the effects of a disaster, appeared to come second to that of those she is responsible for. While care for children is to be expected, it becomes increasingly difficult for women to cope with everything they must handle if they are still dealing with physical or psychological complications. If women are forced to cope with all of these difficulties alone, they may become quickly overwhelmed. It appears that a strong sense of community helped the women either find available help and counseling or assistance with basic needs, leaving them open to address other problems more efficiently.

Work

As with all other aspects, the importance and maintenance of women's work roles varies across respondents. Those who had significant damage to their homes typically took off at least some time from work, and a few lost their jobs as a result. Some women's jobs were unaffected by the storm, and they quickly continued on with their everyday routines. Interestingly, some women's jobs revolved around the tornado, either because they worked for the city before or were involved because of their job in disaster relief. This section will provide examples of how participants

seem to have found some sense of normalcy in returning or staying at work, and those that lost their jobs became increasingly stressed as a result.

Not all the women in the sample had significant damage to their homes, but those who did typically needed to take time off to get back on their feet. Employers either gave their employees time of (paid and unpaid) to recover or caused a roadblock in the women's recovery by being inflexible, forcing them to try to both work and recover. Those who got the time off reported being grateful and using it well, but being eager to go back to work to get back into their daily routines. Jaime was one of those who was able to get time off, and when asked she explained, "My job gave me two weeks off, paid, not having to use any sort of leave which was really good. Um, and they would have let me have more time if I needed it but I needed to be back at work, be where it was normal." Donna was offered time off from work, but decided against it, preferring to stay at work where things were more normal, saying "I like my daily schedule, I like order in my life." Molly and Tie both worked for commission, and when they were unable to work because they were too busy trying to recover, they lost their jobs. Losing their jobs had a significant negative impact on both of them, since they were also both dealing with trying domestic situations, children, and lower incomes. Tie was eventually able to find another job, but Molly never quite got back into a normal, financially stable position.

Disaster relief and mitigation provide unique employment or volunteering opportunities.

Returning an entire community back to normal after a tornado takes months of work from many different individuals and organizations, and preparing for the possibility of another one in the future can take more personnel. Because of this, several women who participated either worked for an organization that was responsible for disaster relief/mitigation or quickly became involved. For example, Dana's job required that she help organize the recovery effort and was responsible for contact with media sources, including the city's Facebook page and website. All other work activities subsided for Dana until the community was relatively normal again. When asked if

being a woman made a difference in how she was able to do her job, Dana said that she believed she was more emotionally capable of handling everything than men.

So yeah, I mean, I think it [being a woman] was a huge bonus, I think it was an asset.

And I don't know if the guys would admit it but, I mean, I think I probably was more with it, maybe, just able to manage stuff and handle stuff better. I know I did a better job of making our employees feel like it was ok to cry, or it was ok to cuss, or it was ok to you know. I hugged one of our police officers on probably... Wednesday or Thursday that was at one of our checkpoints, and he Facebook messaged me and he goes that was the best thing that's happened in five days.

In fact, Dana related the care of her community to that of the care she had for her own children, stating “most moms are the orchestrators of the daily routines and things like that so not only am I that, I'm absolutely that, I'm also that for the whole city too.” Dana’s experience seems to exemplify how much responsibility a working mother could take on in a disaster situation. Casey also worked for the city as part of its emergency response personnel. Her role in the disaster was incredibly important and she worked many long hours in the weeks following, an experience that she believes permanently changed her life; “this is something you kind of find out what you're made of. After this I realized that this is the job I'm supposed to do.”

The tornado also created space for new jobs or opportunities for some women. Several of the women had worked in related fields before, but found themselves working with those who had been affected by not just the May 20th tornado, but all the tornadoes that occurred in the area that spring. I myself was hired on as a disaster relief coordinator for a local non-profit as a result of the sudden need for more employees to serve the increased demand. This creates an interesting dynamic between the loss of resources or work for many, but the apparent gain of employment or opportunities for others.

Gender Roles

Gender roles were not brought up often by the participants, and never discussed outright. Despite this, there is evidence for both the maintenance and the breaking of traditional gender roles.

Motherhood was reported as the strongest role for all of the women, which could be considered a more traditional feminine role. However, the activities women undertook before, during, or after the event all seem to have been mixed roles, meaning some were more traditional women's roles, some were the opposite, and most fell somewhere in between. As has been discussed, many of the women continued to work in whatever capacity they were able while others spent most of their time caring for children or family. The kinds of jobs women did in the "clean-up" process seems to have been fairly mixed along gender lines.

Despite motherhood being the main role of almost all of the women, most undertook a wide array of activities. Some whose job meant that they must work significant amounts of time out of the home after the tornado, like Dana and Casey, were able to leave the care of their children to others in the family. Casey discussed how she went to work and left her husband to care for their children for several weeks after the storm:

I'm a mom, and a wife. And so leaving every day and telling him I'm going to be ok, and him going you're not leaving, you're staying home, and me going no I'm gonna go, I have to go. That was really hard because it was like the reversal roles and he's a wonderful husband, very very supportive, and I know he was very frustrated with this process.

Others, like Tie, were able to care for their children full-time with the support of spouses or family members. However, it appeared that most women simultaneously cared for their children and worked towards recovery and normalcy. Amanda reported spending the initial few days after the storm juggling many tasks, the most important of which were to find new childcare for her son, file insurance claims, organize the cleanup effort, and find a new place for her family to live.

She described having so much information to organize that her and her husband kept a notebook to keep track of it all. "I had a notebook, and we just kept everything in that one blue notebook, I still have that notebook, I'll have that notebook hopefully for the rest of my life. We just wrote every claim information, every 1-800 number was in that notebook." Jaime also reported trying to balance everything, more because of her personality than lack of help from her husband. Most of the women seemed to have taken on multiple roles with varying ranges of success and stress, but none appear to have been bothered or surprised by this and simply did the best they could do in the circumstances. Casey described how difficult it was being one of the only women in a group of men:

But it was hard being, not being able to talk to other females about what was going on. Being strong and not wanting to cry and not being so exhausted that you just cry, you know that feeling, or having to go to the bathroom every 5 seconds practically and not having anywhere to go so I'd just sit there and hold it cause you know guys can just stand up and go anywhere, you know, or porta potties. I have to take half of my crap off just to go to the porta potties. That was, just little things like that was hard.

The kinds of physical cleanup activities that the women did followed more stereotypical gender lines. Very few of the women did much of the physical labor involved in cleaning up after a disaster, and those that did participated in things like cleaning out and organizing the family belongings while the men or hired crews did the more heavy labor, like large debris removal. Day volunteered with her oldest daughter for several days, helping with debris cleanup, and she described how it was all organized.

So as you're out there with your shovels and people you've never met before just all cleaning up the yard or whatever and there were men with tools and stuff so if there needed to be something chopped or cut or whatever there was a crew coming around to

do that. So we were just the lowest level, literally when it got to when you couldn't use a shovel anymore you just scooped up with your hands, or dragging tree limbs to the side of the road.

Day described a scene in which the men do most of the hard labor, while the women or young adults work on cleaning up the smaller, more manageable debris. While there was no doubt some mix of both, it is interesting to note that Day's perception was that of traditional gender roles.

Dana also reported going through what was left of her and her husband's home cleaning and salvaging what she could while he organized the removal of dozens of destroyed trees in the yard. In the long-term recovery, Dana took on almost all of the redecorating decisions and tasks while her husband made himself available to pick up furniture or do small tasks not hired out to a contractor.

With so many of the women heavily involved in the relief effort, it is nearly impossible to say the majority either conformed to traditional gender roles or broke away from them. In some areas, like cleanup, they seem to conform, but take on so many extra organizational and work duties that it appears they have also branched away from these more traditional roles. Instead, it appears that these women have taken on many different roles, attempting to balance them all. This phenomenon does not seem surprising, as literature on the "second-shift" will tell us that women are taking on multiple roles in all aspects of life, not just when related to disaster (Fothergill 1999).

COMMUNITY CAPITALS FRAMEWORK

A disaster results in countless shifts in resources that are available, lost, and given. These resources are essential to the everyday life of those who utilize them and can make the difference between struggling to recover and returning to normal life fairly quickly. Significant resources are lost immediately after the disaster and must be recovered, often with the use of other forms of

resources. The community capitals framework provides a valuable organizing tool to understand what types of resources women were able to access before, during, and after the tornado. It is essential to understand what kinds of resources women have access to during all phases of a disaster in order to comprehensively address whether or not they are receiving satisfactory resources. For this reason, the community capitals framework was utilized to answer if women were receiving such resources and the level to which these community capitals were beneficial. In doing so, my research questions relate to what kind of resources women have access to and consequently how well they are able to cope.

To answer these questions, I asked each respondent to express what kind of resources they were able to access. In addition, access to all forms of capital tend to come up naturally in conversation, especially when discussing what kind of damage the women suffered. The more abstract forms of capital, such as political capital, sometimes required me to ask follow up questions to steer the conversation in an informative direction. By using Community Capitals Framework (CCF), a seemingly wide array of conversations can be related and organized into specific themes that allow for a stronger analysis. This section will examine each of the seven forms of capital and use examples to understand the importance of each in this case study.

Built Capital

Built capital is defined by Flora and Flora (2013) as the physical infrastructure, communication systems, and other man-made resources available to members of a society. In the case of a large natural disaster, these resources can be physically destroyed and need to be regained in order to achieve normalcy. For the purposes of this study, built capital included structures necessary to survive a large-scale tornado, like a storm cellar, local shelter, or a structurally sound room in which to wait out the storm. Additionally, built capital includes the physical infrastructure that is destroyed by a tornado, such as homes, businesses, and roads or power lines. Finally,

communications systems are included as built capital, as the loss of infrastructure damaged the ability to communicate through cell phones, internet, or landlines. All of these are resources that are used on a daily basis or are required for survival, and their absence can impact the experiences of those involved in a disaster significantly.

Where an individual rides out the storm made a large difference in not just their physical health, but also their psychological well-being. Having access to an underground shelter improved the feeling of security and enabled women to stay safe. Acquiring a safe shelter can be an expensive, long-term investment that is often not available in lower income rental properties or complexes. Molly was forced to wait out the storm in her rental house, and she describes where she took shelter:

And when they say get in an interior closet, they mean an interior closet. Because when everything was done the closet I was in was actually in my kitchen next to my pantry, because everything else, the bedroom closets were all on an exterior wall. That was the only interior one I had.

While Molly was uninjured, her home was destroyed. Fortunately taking shelter in an interior closet was enough to keep her safe, but is not a feasible long-term preparedness solution, as the previous quote demonstrates. Some were able to shelter outside their home either as a prearranged plan or because they were forced to. Amanda and her son were able to shelter in a neighbor's storm cellar thanks to a planned agreement that they could use it whenever they needed to, without specific permission. She described the plan, stating:

So when I had driven home that night I went over to my neighbor's house and I said hey [redacted] I've never even, like I know we're supposed to come to your house, but I've never even opened a storm cellar, I've never even been in one, would you show me how to open your storm cellar? Never thinking that the very next day I would have to use that.

The majority of the respondents were able to shelter in place when the storm hit, and the effectiveness of each varied depending on the ability of each structure to withstand the storm. Both Daisy and Jackie took shelter in a safety deposit vault, which was the safest place at the moment, but not meant to withstand an EF5 tornado. Daisy described how they were able to keep the door shut; “this guy took his belt off and strapped it through an oxygen hole, I don't know what it's for, but strapped it through some kind of thing and secured it to like the vault door somehow.” In addition, Jackie and a police officer physically held the door shut after the belts had snapped. The mood in the vault was that of a panicked fear, as many who took shelter there believed they were going to die. Daisy described the event, saying “it was crazy and it was just so loud and you could feel things hitting the vault like when we got out we saw that like a car had hit the vault, or like there was a bowling alley right across the street, so like bowling balls were like hitting the vault.” Not only was the vault’s inadequate status as a tornado shelter a significant threat to their physical health, but provided the source of psychological trauma. When rebuilding the bank, the vault was built to be more structurally sound with heavy-duty bolts intended to keep those sheltered there safe and secure.

The two schools that were demolished by the tornado did not have any well-built shelters in place for the children and adults who care for them. Generally, students take shelter in the hallways or bathrooms, away from outside walls. Layla was a teacher at the time of the storm in one of the schools, and described taking shelter with her students in the hallway.

We had them in the hallway, we were on one side of the hallway, pre-k and first grade was, kindergarten was on the other side of the hallway, and 8 foot hallway. We just sensed the urgency to protect the kids. And so they were knelt down with their hands above their heads to protect their heads and we just got down on the floor with them and just rubbed their backs and um, somebody started singing.

Despite these precautions, those sheltering in the halls were not completely protected, and became buried under debris, resulting in injuries and death. Layla described the actual event, saying “I guess I must have passed out because when I raised up and started shoving things, like debris off my face and stuff and kind of turned, I turned towards where my, my teaching assistant and my kids were, I didn't turn the other direction at all.” Layla and the children she was sheltering escaped injury, but had to be unburied by some men who showed up to help. Later, Layla described feeling emotionally distressed when the wind is blowing, or the air conditioner turns on at night, and attributes these feelings of stress to flashbacks from the storm:

You know I might tell you a few things that I did have problems with. And I'm sure everybody has their own little issues. Probably for at least 3 months after the tornado I did not like wind blowing in my face. Did not want, loud sounds bothered me, not fireworks or anything like that. Just you know, I felt this year was sensitive to loud sound. I, there were for weeks probably every time the air conditioner came on at night it would wake me up. My husband has one of those sleep apnea machines, and it still sometimes bothers me. Not as much as it did. But I mean, I would get up, lots of nights I would get up in the middle of the night and somewhere, besides where the noises was, but it was the air conditioner turning on or his machine or the ceiling fan or whatever. It's like oh I can't handle that, you know. But now still occasionally I have that. And for whatever reason sometimes I just wake up in the middle of the night like I've relived the whole thing in my mind. From start to finish you know, it was like ah!

Having access to well-built structural resources makes a vast difference in how well the women and the people in their care were able to withstand the storm. This form of built capital enabled most of the women to wait out the storm feeling relatively secure and unharmed. Alternatively, those who do not have access to this form of built capital find themselves with fewer options to stay safe.

Built capital accounts for a vast majority of families' assets or ability to travel and communicate. Seven of the respondents had significant or total damage to their homes, and each describe the damage. Molly's rental home was totaled:

But when I came out there was no roof at all, the three walls of the closet I was in was still there, and half of the door was torn off. It was still closed on the bottom section with the hinge but the top half of the door was gone. There were boards actually through the walls and stuff, that there were no exterior walls, there was no toilet, no sink, no refrigerator, no bathtub! And I thought, wait I thought you were supposed to get in the bathtub or an exterior closet, apparently not! Because literally there was three walls of the closet I was in and the foundation, that was it. I'm like, aren't there pipes and stuff coming up out of the foundation? Where are the pipes that come out of the ground? There was nothing but trash and there was big huge bed that wasn't my bed in the middle. And couches and everything else all tore up and nothing I recognized.

Donna, whose home was not completely totaled, but had to be redone, described her feelings when seeing her house for the first time. "I jumped off the truck and turned around and it just hit me like a ton of bricks. You know, my house looked so dark. It was daylight, but it looked so dark, and it looked like a haunted house. All the windows were broken in, all of my huge, beautiful trees were down." Amanda's home was half standing, and she described seeing it; "We finally get the door open and I just started laughing so hard, because if I had just walked around the half wall that part of my house was gone. Like I could have just walked into the house."

Jaime and Natalie as well both had a loss of built capital, as their homes were destroyed.

Initially, the debris of the storm made other kinds of built infrastructure, mainly roads, nearly impossible to use. Perhaps the most poignant example of this comes from Casey's story. Casey is a police officer who was a first responder to the disaster. She and her coworkers were some of

the first back into the area to help those still stuck, and had difficulties working around the debris that blocked their paths. Casey said that “everything else was just, it was like a third world country, it was destroyed.” Because of the destruction of normal infrastructure, Casey and other first responders were forced to either clear a path first, or walk to the rescue sites. This same infrastructure failure that made it difficult for emergency personnel to get around also made it nearly impossible for those in the area to get out.

Perhaps one of the most problematic consequences of a loss of built capital is the inability to communicate with friends or family. Because communication systems, including cellular signal, go down in a disaster, those impacted are unable to coordinate with their family to let them know they are safe or make plans for meeting up and sheltering for the night. Many of the respondents discussed this problem as a source of significant stress and unease. Amanda described waiting to hear from her husband, “we kind of waited around for a little bit, I was trying my phone the whole time, trying to send messages, I couldn't call out, I couldn't text, nothing was happening on my phone basically. So I said ‘well we're just gonna wait, we're gonna wait and see what happens.’” Jaime was unable to contact anyone, and walked through the neighborhood towards her daughter's school asking if anyone had phone access and was finally able to use a couple's phone that was connected to a landline and still working. Daisy as well ended up walking through the destroyed area attempting to find a way to contact her husband:

So we walked for like a mile, and both of our phones were dead and we just wanted to talk to somebody to make a plan and we couldn't and every time we asked somebody if we could use their phone, they were talking to their family, they were trying to get ahold, obviously.

These three examples are just a portion of the difficulties the women who were in the disaster had with communication. All of these failures of built capital represent a majority of the initial cause

of the problems these women had to deal with. Restoring their built capital became a primary goal in the recovery effort, and represented a significant amount of the issues which the women needed to overcome. Because of these significant losses of built capital, the level of other available resources determines how readily the women and their families were able to return to normalcy.

Natural Capital

Natural capital is considered to be the natural resources available to members of a society, including forests, waterways, plant life, and animals (Flora and Flora 2013). A tornado itself is a natural phenomenon, and while it is unlikely to be considered a useful resource, it is still a part of the natural world humans inhabit. Since other forms of nature are considered to be a useable resource, it is important to acknowledge the alternatively destructive power of a tornado. When considered this way, a natural event appears to determine the importance of all other forms of capital. Indeed, the tornado works to destroy existing capital necessitating the use of different resources to restore and prepare for this damage. The community of Moore is located in an area with historically reliable patterns of severe weather and so tornadic activity should be considered a resource, if a negative one.

Forms of natural capital that were destroyed by the tornado were limited to a smaller sample since the majority of the affected area was urban. In a more urban setting, there are less natural resources to be destroyed, and are usually limited to green spaces or private gardens. Only one respondent lamented the loss of natural capital, and in fact this loss was her main concern. Donna and her husband had initially chosen the location of their home based on the large amount of trees on the property, and spent hours of time maintaining their property every week. When the tornado hit they had a fair amount of damage to their home, but lost all of their trees completely.

I went to look at the backyard. That was probably the most devastating. I just know a house can be rebuilt, but all, that's the reason we bought the place, because of the property, because of the beautiful trees. And gosh, they were just all gone, there was no repairing, there was nothing we could do.

Donna mentioned the loss of her trees again and again throughout the interview, emphasizing how emotionally traumatizing it was to have to see and clear what living resources she and her husband had spent so much time and effort caring for. In her case, the damages to her built capital could not compare to the feeling of loss that accompanied the destruction of her trees.

Financial Capital

Financial capital, or the income, savings, and other resources related to money, was one of the strongest determining factors in the respondent's recovery (Flora and Flora 2013). Almost all of the respondents, and all of the women who had some kind of loss, mentioned the importance of being able to access enough funds to recover. This can include having enough savings, having supportive insurance, working with honest and financially stable organizations, and being able to access help given from relief organizations. As discussed, those women that had less financial resources had a more difficult time recovering satisfactorily, and those who had decent access struggled to return to their normal state.

Financial capital was essential for the women and their families to be able to find an immediate place to stay, replace both daily items like clothes and long term items like furniture, and to be able to rebuild, buy, or rent a new home. Having savings was a first step in being able to afford these things. Those who did not have easy access to cash were forced to borrow initially. Molly depended on some friends loaning her money; "the night after that some friends of mine had given me a loan of \$200 until I could get access to my own money, but that was a lot of money

for them to loan me.” Jaime and her husband also had to borrow from their parents while they waited for the insurance check to come in.

Insurance was an essential mitigation technique for those living in a disaster-prone area. All but one of the women whose property was damaged had insurance of some kind, and the one who did not, Molly, had the hardest time recovering financially. However, the effectiveness of the women’s insurance varied. Some women had great insurance, and were simply handed a check for the estimated value of all property lost. Grace had a good experience working with her insurance, and she stated “luckily, we did have everything, we did have insurance, and we didn't have any fights with our insurance.” Amanda’s insurance also simply totaled her home and gave them a lump sum; “but we were so lucky, I mean we were just so lucky because my house was totaled and my insurance wrote us a check.” Unfortunately, not everyone who had insurance found it to be a functional resource. Jaime’s insurance required that they itemize their entire household, and then depreciated the value of each item, causing much more time and stress to the process than if they had just given a lump sum:

I was making inventories of things cause of our insurance process I had to claim everything to get anything for it. So I had to inventory how many t-shirts did we own, how many bras, how old were they, where did I buy them, what was the value, and then they would give you the depreciated value.

Jaime goes on to explain further troubles with the insurance company; “cause I knew that there was housing just filling up real quickly and our insurance company did not tell us what we had available to us, they didn’t tell us they had specialists that would do that for us. We had really bad communication from the insurance company.” She goes so far as to jokingly insult them outright; “oh they were horrible. *laughs* Horrible. Many a pox upon them.” Similarly, Natalie lived with her boyfriend in an apartment that was eventually closed to repair the massive flood

damage cause by the rain from the storm, and their renter's insurance proved to be inadequate; "and we talked to, I have renters insurance. They did nothing. Absolutely nothing for us because none of our stuff was damaged. It was just the building and we didn't own the building so it didn't matter. So they gave us nothing."

Jaime's financial problems did not stop and the difficulties with her insurance, but provide a vivid example of how the mismanagement or outright fraud of organizations can cause extreme financial woes after a disaster. Jaime and her family hired a particular builder to rebuild their home, and the troubles that resulted spanned years, caused much unneeded stress, and placed them in a dire financial situation:

Which we ended up going with a bad builder, we're, we have some problems still going on. They're trying to foreclose on the house. They went over, they went over the contract price by they claim \$33,000. Without any work change orders. They put a lean on the house and now they're suing us. So we're going through that.

The difficulties with their builder are still a problem and they were forced to take the builder to court. While this particular builder seemed to have a record of abuse and Jaime and her family will most likely be able to win their case, not all victims of such abuse have the resources available to them to counteract a bad organization.

The event gained so much attention that money began to flood into the area enabling a massive presence of relief organizations, both old and newly established. In fact, the respondents who worked for the relief effort stated "it was fund catching, not fund raising." All of these organizations and the vast amount of money they controlled represented another financial resource that was available to women and their families. However, the ease of access differed, with some getting plenty of resources this way and others getting none at all. Those women who had the most obvious and pervasive damage were able to get more of these type of resources,

such as with Jaime. Jaime was able to get assistance from the Multi Agency Resource Center at West Moore High School, independent donations made to the library, the Chickasaw Nation, associations with her sister-in-law's church, and through Facebook friends. Of the other seven women whose homes were destroyed only one did not get any help from a relief organization.

Interestingly, Donna did not receive any assistance other than her insurance, and credited that to having too much income and assets. "I felt like our financial status, the fact that we had a bigger home than maybe some people, most people, that was our hindrance. That is, that changed the rules of this game for us." It would appear that there were some stipulations for receiving help other than simply having property destroyed by the tornado. Donna believed this to be unfair, and thought that aid should be given out equally to those who were affected, no matter their income. This particular perspective does not appear to be examined often, and the equity of aid on both ends of the spectrum would be worth examining further.

Cultural Capital

Cultural capital, or what we know and understand based on our cultural experiences, means something unique in a community with a history of severe weather (Flora and Flora 2013). What to do and where to go in the event of a tornado and the ability to know when one has become a real threat are all something those who have lived in Moore, or Oklahoma, can grasp based on the cultural knowledge of the area. Those without this cultural knowledge are at a slight disadvantage, as the tornado was the first time they experienced anything like it. There are multiple examples of this; Molly states "I didn't grow up here in Oklahoma so I'm not really used to tornadoes." Similarly, Amanda says "I'm from Florida, I didn't grow up here. So we, my husband is from Oklahoma, but I'm not from here so I didn't, you know, grow up with that experience," Casey stated "I'm not from Moore so I wasn't familiar with the other tornadoes." All of these women say almost the exact same thing, and believed that their lack of experience with

tornadoes resulted in an inability to react immediately and effectively by either taking adequate shelter, being able to understand what was happening, and finding resources during recovery.

Similarly, the recurrence of large tornadoes in the area has created a disaster subculture in Moore that allows women to use their experiences to create a framework of disaster response. Because disasters like this one are recurring in the community, culturally ascribed reactions, programs, and understandings become part of the structure of the society. Many respondents attributed having experienced such an event before with their ability to cope or understand. Dana sums up this phenomenon when she talks about being far away during the event:

There's like hey, you live in Oklahoma, you live in central Oklahoma, you live in Moore, but we absolutely know what to do in case of a tornado. I'm never scared. I'm only scared when I'm not here. I'd rather be in a tornado than in Las Vegas watching a tornado hit my town, a hundred times over.

Dana's cultural capital in relation to tornadoes actually appears to make her more comfortable around them than witnessing them from afar. Others had remarkably similar thoughts. Donna states "that time of year would just, you're pretty much used to it," and Day said "at that point it was big, and I've seen enough to know." These are examples of how cultural knowledge has enabled women to grasp the situation, but two of the women who had cultural capital were taken by surprise when this tornado challenged their previously-held knowledge. Layla was not prepared because she had always thought tornadoes occur later in the day; "It's probably the only time I've been scared, even this day I don't remember being scared. I'm still thinking in my mind tornadoes do not hit Moore at 3:20 in the afternoon. You know, that denial, it just doesn't happen, it's not time. *laughs* you know, it's not time!" Daisy also knew what she was supposed to do, but had never actually been in one, so she was taken by surprise when the tornado actually occurred; "Cause like, I mean, I've lived in Oklahoma all my life, there have been tons of

tornadoes, like none of them have ever personally affected me. It was kind of like an I'm invincible thing, like that's never going to happen to me.”

Human Capital

The community of Moore possessed the skills and abilities necessary to put forth a great relief effort for those individuals in their community. Although not all of the respondents had sufficient human capital, or the abilities required to recover, most did or had access to others who did (Flora and Flora 2013). The relief effort itself encompassed a wide array of folk with particular skills, drive, or time to help those in need. Unfortunately, for those who did not have the skills or connections with others who did, it was more difficult to recover. Molly, who had never experienced a tornado before, “didn't know what to do, didn't know what was going on.” She was unsure of where she could get help, what local shelters were available to take both her and her child, or how to get her identification card and bank cards replaced. Many factors surrounded her struggles, but without this knowledge she had a hard time knowing how to fix her problems. Others, like Donna and her husband, lacked the physical skill to do what was necessary. Donna’s property was suddenly covered in the remains of hundreds of trees, and while they normally would have done the yard work themselves, they needed to reach out for help; “my husband would have generally done it himself, but gosh he was overwhelmed already, we said yeah go ahead and work on that tree.” Fortunately Donna and her husband did possess the knowledge of where to access help; “My husband deals with construction, so he came up with the equipment. I mean we didn't just need a chainsaw and shovels, we had large graters, we had large pieces of like construction equipment in our backyard to remove all the big trees.” Amanda also reports difficulty accomplishing tasks, “the physicality of it would frustrate me, that I couldn't lift this door to get to that part of the closet, or you know, the, I'm only 5 foot 4, I don't have unlimited strength, I can't get as much, I was frustrated with that part.”

The relief effort was largely in thanks to the human capital of the volunteers as well as the financial capital of donations. Day, whose home and family were safe, felt that the best thing she could do to help her community was to clean up debris, “there is just so many, you just feel really helpless and all you got really, like you, for me personally you want to do, you know, I want to cook something for someone or whatever. So all you got is the cleanup. That's all you can do.” Her observation of her own work and the work of those around her led her to believe that the community’s ability to recover, their resiliency, was one of the best assets they had, she explained, “there's a resilience, and when you have seen that happen, and seen the rebuilding, it gives you a little bit better picture of can be rebuilt.” For others, the training they had had only went so far. Casey, who was trained as a first responder, said “I think this is an event that it is just, you just jump in, this is, you find out what you're made of. I mean at the academy we do a lot of scenario-based training, which in theory sounds like it's a great idea. It's not.” She used what she knew while also adjusting to the situation in order to handle the experience and do her job. Similar to the lack of experience, Casey also thought that her emotional abilities got in the way of her abilities to react like she was supposed to. However, she did learn from this experience and feels more able to handle the situation; “and then it, it just, I think around that time that I realized also that it's ok to have emotion when it's appropriate. There's a time and a place and I think that I handled my emotion as best as I could considering I was not prepared for this. I am now.”

Those affected thought that having someone to guide them through the process, with the skills necessary, would have been immensely helpful. Jaime thought guidance was one of their immediate needs; “but my husband and I, it was we need clothes and toothbrushes. And guidance. We kind of didn't know what to do.” Natalie had similar feelings, and she said “I felt like eventually I was able to get the resources, but I was going in blind cause I never had to do anything like this before.” Fortunately, those who were able to gain useful knowledge shared it

as much as they could. Natalie talked about her particular set of skills; “going online and researching was probably my biggest thing, but a lot of people don't have research skills or whatever. Being, going to school to be a historian, that's a big thing that you learn how to do.” She later went on to discuss how she would share this information as much as possible with others. Amanda as well used her workplace to further spread the compiled knowledge of her and her employees through several programs at the local library, enabling the spread of human capital throughout the community.

Political Capital

The amount of political capital, or power to shape standards, regulations, and organizational practices, was a passionate matter for those women who participated in the recovery effort (Flora and Flora 2013). In fact, that was the entire focus of a two hour long conversation with three women who were crucial players in the organization of relief for the entire community. The entire discussion focused not on what methods were best-suited for helping the women and their families in the community, but on the politics between themselves and the other officials they worked with for the nearly three year process. All three expressed incredible amounts of frustration with the amount of time they were forced to spend navigating and asserting whatever political power they possessed in order to achieve what they thought was a more helpful approach to the recovery process. Deanna T., one of the women who worked for a relief organization, does a spectacular job of describing what it is like to be a woman in the “boy’s club” of working in Oklahoma.

Well let's talk about what that means as a woman though. Cause I'm, I'm thinking you know one of the surprises to me was to come back to Oklahoma and have forgotten how, what a boy's club it is. You know? Because I was kind of spoiled, working elsewhere where it wasn't quite that way. So I think that women in leadership here, especially in the

executive positions, have had to subscribe to a particular set of rules about how you're supposed to function that may not be natural to us as women. Um, we've got to look tough, because you know we had to be tough to get to this position.. And so when I'm hearing you talk about how we can handle anything because it's not a big deal, you know I'm hearing wait a minute.. Is that really who you are or have you had to learn how to be tough? To survive the position that you have in the boy's club?

Deanna T. has said that, not only is it necessary to ascribe to the expectations of those in power to achieve any political mobility, but that a woman working in leadership positions in Oklahoma must reject any natural inclination or traits of womanhood to be taken seriously in the political world. But Daisy A. disagreed with her. While Daisy A. conceded that there are some significant difficulties working in the "boy's club," she also thinks that it is the other women's "cattiness" or viciousness that caused the most problems for her and her team. These women experienced multiple clashes with others in the relief effort who did not appreciate the way that they were questioning how things had been traditionally handled and threatened to use their power to make them stop, if they had to result to getting them fired.

This particular focus group claimed that disaster relief has now become an industry, and that it is an industry led by women, since women are more likely to be involved in work relating to helping people. Daisy A. explained:

It's an industry here. It is.. It is and it cannot help but be. So I say this attaching no blame to the organizations that benefit from the aftermath of disasters. But you know, it's a money making proposition for a lot of organizations here in the state. You know, a bad thing happens and a lot of money comes in and then there's a lot of you know, um jockeying I think for power and control.

Deanna T. added to the idea of disaster relief being an industry by stating women's role in said industry; "yes but women happened to be in charge of those organizations that tend to do the mop up, so in many ways." Daisy A. goes so far as to credit the entire process to the handling of money.

I think just from my perspective it has been... It has been very money driven. It has been about who has the money, who might try to get the money, who you know.. Who is not doing what they should be doing, who is trying to be doing more than we think they should be doing.

Unfortunately, all of these politics meant that more time was spent arguing over the proper way to help people than actually helping people. When asked what effect all of these arguments had on the people who needed the help, all three of the women in the focus group immediately laughed and Daisy A. responds with "thank you. Cut. That's all that needs to be said. I'm sorry, that's all that needs to be said about that. People? We're trying to help people? Our purpose is to help people?" Deanna T. also emphasized this point; "I think it's really interesting that you, that this far into the interview, that that question comes up, when in reality you had to bring it up. Which says to me that a lot of our energy, a lot of our energy and our time that we spent was in dealing with uh, power structures at play." Dana, in a completely different interview, had something to say on the subject.

But no, I'd love to hear the guy's perspective of a female in charge. The [police and fire] chiefs I think would be awesome to hear their perspectives cause that, I think they would, I think they would think that they know females are strong but I think they probably were damn glad that they had some really strong females that were around during that time. That's how I'm gonna think of it.

There were other political issues as well. Because several children died in Plaza Towers Elementary, a major effort was undertaken by some members of the community to get storm shelters incorporated as a standard in schools. Dana, as a city official, actually felt betrayed by some of the mothers who were seeking litigation against the city and the school district for not having shelters in the first place. Jaime also encountered, and is still encountering, troubles with the court system as she and her husband attempt to get reparations from the builder that took advantage of the situation.

Social Capital

Social capital, or the social connections you have with other people and organizations, was a crucial resource for all the women impacted (Flora and Flora 2013). Social capital takes many forms after a disaster such as this one. Since the tornado was large, but not large enough to wipe out the entire city metro, those whose homes were destroyed were able to seek immediate shelter with family, friends, or neighbors. These social connections also enabled them to locate the more urgent needs, like simply having something clean to wear or food to eat. Social capital came into play later when it came to cleaning up and moving on. It enabled some to be able to do their job more effectively, or ensure the safety of their children. Social capital was pervasive in this event and made all the difference in how well the women were able to get the other resources required.

While most of the women who lost their homes were able to stay with family or friends while they repaired their homes, Molly and her daughter ended up staying in a Red Cross shelter while Tie and her family stayed in a hotel. The others were able to find places to stay that did not require using any financial resources. Jaime described moving in with her family until they could find a rental home; “I took one kid to my mom’s to clean her up and my husband took the other kid to his moms just so we could all shower and then we went to my mom’s house and moved in for a couple of weeks, until we could get a rental.” Amanda and her family were able to stay with

her husband's coworker in town for a few days until they could locate a rental home. Grace and her husband were faced with limited options for being able to get out of town, and so utilized an awkward social connection:

We, you know we finally drove around in circles and remembered somebody here from the church that used to come here to the church and didn't even really leave on good terms, but we kind of knew them and they lived in the area a little bit further away from our area and we just showed up there that night with our kids and our dog and all our food from our fridge and just said can we stay here tonight.

Daisy, whose home was untouched, was able to stay with her grandparents the night of the storm when she became stranded in the area. These social connections provided the necessary jumping point between being stranded on the street with no home or possessions to being able to start the process of long term recovery. With a place to stay, and often food, clothes, and borrowed money, these women and their families had more options available to them than those that lacked these social connections.

Social capital also helped women and their families clean up and rebuild. Jaime had so many people helping her and her husband clear their property they could not keep track of them all. Natalie and her boyfriend had friends show up to help them move in a rush; "and yeah, it was great. And while we were there all day Saturday we had our friends like me and [fiance's] friends, I want to say we had about 8 people at our house packing things up. We weren't even there while they were packing." Donna had friends show up to help her salvage what she could from her home, find a new place to stay, and help clear debris in the yard, and she was grateful for the help; "those were, a lot of things to think about and to handle immediately, so those immediate needs we had we're so thankful that we had friends that were there for us." A social connection also enabled them to place their dog safely; "and then a really good friend of our son

and daughter in law, he's a friend of ours as well, a young man, he called us and said hey we would love to have Lucy, our dog, we'd love to have Lucy to come stay at our house if that's ok, and we needed a place for her to stay.”

Social capital was also important for how women cared for their children. While the women took on most of the childcare duties, they still needed family and friends to care for them. Day had a hard time getting to her children, so her father took care of them; “luckily my dad was in town and was able to swing around and pick everyone up except for my eldest, so when I got home everyone was home.” Dana’s husband and family cared for her children for weeks while she focused on the community’s recovery. Amanda was able to use her contacts to find a new day care for her son:

I called my friend at the Y, I'm on the Y counsel and I said I know he's not in that day care program, do you have any extra space and they said drop him off, we'll give him lunch and keep him past hours and figure, cause you know, it would take 2 hours to get to Norman, or it would take 3 hours to get back to here, cause you never knew which road was open of you know, that sort of thing.

These are just some of the many examples of how the women found help through their social connections, or how women were able to be the help themselves. Social capital not only represented its own essential resource, but provided the connection between these women and the other kinds of resources they needed to recover.

THE RESILIENT CITY

If you live in Oklahoma, you have likely heard of Moore and you associate the suburb with repeated tornadoes. Others question the decision to continue to live in Moore anytime there is any tornadic activity near the area. People ponder why anyone would stay there and risk being hit by yet another disaster. Moore, Oklahoma is associated with this stigma, yet the folks that live

there do not agree with the negative stigma associated with their city. In fact, most love the community they live in, denying that it is a risk and are instead proud of the particular resiliency of their city. For those who live there, Moore is strong, cohesive, and most importantly, home. Moore, Oklahoma has come to be identified as the city that can pick itself back up, time after time, extraordinarily fast by both locals and outsiders. Using grounded theory, the idea of women's strong identification with their community's ability to work together and recover allows for a more in-depth discussion on community cohesion and its consequences. This phenomenon is perhaps best said in the words of one such community leader, Jackie:

People say 'why do you work in Moore, why do you want to go back there?' *laughs* You know, they're amazed that you would want to work or live or do any of that here. But I say, why not? I mean you can't let that define who you are or what you do and you know, I definitely respect it, but I won't, I won't let that chase me from where I'm going to be or what I'm going to do.

The first people to respond to the disaster were civilian members of community. Before any first responders or outside organizations could clear a path and get to the destructed area, neighbors helped neighbors, people traveled on foot to find their families, and dozens of people flocked to both elementary schools. In the minutes before the police and fire department could make it to the schools, teachers, neighborhood men and women, and young people helped rescue the children. Layla, a teacher, recalls how several men from the neighborhood were responsible for digging her, her students, and fellow teachers out from under the debris:

And uh, some guys rushed in and I told them, I said between me and I pointed to [redacted] it's about 6 feet away, that's me right there. And this was while I was still passed out, and [redacted] was down here by this white thing, that's about 6 feet. Between us there were 2 adults and 8 kids between us and they're totally covered in debris.

Once Layla and those under her care were out, she recalls seeing many more people rushing to the scene to do what they could. In fact, one of those women may have been Molly. After getting out from the closet she was sheltering in and making sure her cat was safe, Molly immediately ran to the school:

I was like a block over and not only was the elementary school gone, I could see kids just running everywhere... It was like an anthill. Kids just running, so I immediately started running that way and we started grabbing kids and, you know, telling them "Come this way, come this way", and they're running all over the place.

Before too long, emergency personnel made it to the area and took over, requesting that everyone leave the area.

At the other elementary the story was much the same. Grace and her children had sheltered in the school, and she remembers the sight of people rushing in to help; "and by that time you have like adults running from neighborhoods or like towards the school and I mean, there's just, like some of those pictures are just kind of like, just like stamped on my brain." In fact, Grace stayed in the area with her children to help take care of all the other children there, and with the help of some men with trucks, including her husband, they eventually loaded children into the truck beds and drove them someplace safer. Amanda witnessed much the same sight:

And at that point more and more people are kind of coming out of their houses, and then I just saw people running. Just these men started running down the street. And I said what's going on, what's going on? And they were shouting out things like I've got a hammer or I've got an axe or I've got a whatever and I was like where are they running and I realized they were running to Briarwood.

Teenagers sought to help as well. Day's oldest daughter, who was sheltering at a friend's house in the neighborhood, ran to assist. She ended up helping the EMTs provide care to several of the

injured before being told she needed to leave the area. In other areas, not near the schools, people's first instincts were to help one another. Daisy and Jackie were both among those stuck in a bank vault, and it was the staff from a nearby business that came to unblock the door, allowing them out.

In the weeks and months following the tornado, Moore turned into an ideal example of a therapeutic community. The community, for a little while, forgot its differences and began to work together, cooperating and helping each other to work together. Almost all the respondents describe this. Day agreed; "yeah, I feel like the community came together in a radically positive way." Casey was impressed with a community she had just recently become a part of; "and I just thought wow what a great way to bring people together, a disaster. So it was like a blessing behind this like horrible incident, you know? It was, it was really cool. It was good." Jackie was also impressed:

I'm always amazed at the resilience of just people in general, Oklahomans also, but also the people of Moore. You know, people came from all over. You know, I wish I knew who some of those people were now, that wanted to search the building and I told them no, we were all safe. And they weren't like in uniforms, they were just people that I know maybe they were National Guard or something and they just happened to be close, that's a possibility. But I am amazed at people's reaction.

Jackie later went on to say that she "absolutely will tell you I think the community became more cohesive," and more specifically about the people of Moore:

I think that people really do come together. I, I hate to say that a disaster would bring us closer and make us stronger but it kind of does. You know, what doesn't kill us makes us stronger. I think the community did a phenomenal job. I don't know, did you see the "Moore Strong" flag that's out here and you are familiar with the red?

The “Moore Strong” flag Jackie speaks of has indeed become a symbol for the whole town, and many businesses hung the flag, and dozens of t-shirts were designed to show solidarity. There are numerous examples of the women in Moore witnessing the strength of their community, and for some it became the reason they stayed.

Casey and her husband had originally planned to stay in Moore for a few years before finally settling permanently in Texas, but their plans changed after the disaster:

And after being in the department, and being in the community after this tornado, this is my home. This is where I'm going to stay. I know it sounds corny, but it, the sense of, the pride in our community was just, it was amazing.

When asked if she thought the community came together to recover, Jaime said “oh my goodness! That is why, what made us chose to rebuild, honestly.” The tornado brought destruction and sadness, but it also brought people together into a permanent bond that most will not forget. Day recalls how whenever there is a storm the barriers between neighbors are literally broken down:

And then also when you lose your fences, which has happened to us several times, though it didn't on the 20th, then you have all this community because suddenly if you walk in your backyard you can see everyone, you know, it's like being in your front yard. So it's kind of interesting, and you're just helping each other put the fence back up. So those are the small plus, there's definitely a little more sense of community in my neighborhood dealing with storms, cause it's just, it forces several, you have this shared experience and it forces this, a little openness that we don't really have in our culture as much as we used to.

Unfortunately not everyone believed the same way, or at least did not think it was a permanent occurrence. Interestingly those who thought the community was less cohesive than initially

thought were those who had difficulties with political issues. Dana, for example, witnessed some of the negative side that began to emerge:

And then there's that time when all the people that can get their houses put back together do, and so now you drive around and you're like eeeww, what is that house sitting there half dilapidated, and then you have the stigma of being the person that can't get their act together two years after a storm. And so now we are you know eehh, and so now they're ostracized because they didn't have enough insurance to get their house put back together.

Dana also thought that the issue of the storm cellars in the schools was splitting the community, especially because there were legal processes involved. Daisy A., Deanna T., and Catherine all thought that there was significantly more struggle between organizations than was visible to most people, and that it affected those who needed the help. Because the leaders of these organizations were more focused on traditional methods, or maintaining their own power, or simply focused on internal issues, they were less able to adequately help those that they were supposed to be serving. This lack of communication caused some to misunderstand what was needed in order to get assistance, and left them without options. The full repercussions of the political struggles among organizations is yet to be fully realized, but the three in the focus group are sure they will come out eventually.

MEDIA

Media of all types play an essential role in preparing for and recovering from a tornado.

Television and news media, in conjunction with social media, warn the community of an impending storm. Social media enables people to reach large audiences easily and communicate safety or need. And news media of all types help to publicize the need for assistance.

Unfortunately, media can also be a problem if it stands in the way of recovery efforts or continues to subject those who were affected to reliving the event. Through conversations with the women

in this sample, media related issues began to emerge and are discussed using the grounded theory approach.

People in Oklahoma rely on the local news stations to get information about weather, typically because they are the most trustworthy. In the week leading up to the event, the media warned that the 20th would have a high chance of tornadic activity. Daisy points this out; “cause like the whole week before the tornado like the weatherman were like next week is going to be bad, next week is gonna be bad.” Most of the respondents knew that there was a possibility of bad weather and kept an eye on the local news to stay in touch. Amanda was at home sick and as the weather got worse, she went and picked up her son to bring him home; “so I took my son home and got into the house and it started the weather people started ramping up saying there was a tornado on the ground and they were saying the path which it was going to take.” This warning enabled her to figure out the tornado was heading their way, and she got her son and some supplies safely sheltered in plenty of time. Day recalls watching it on TV safe from her office out of town, feeling extremely fearful for her children; “well I watched it on, we have a TV in our conference room, and I only, we’ve never used it that I know of, and we watched it.” Unfortunately, the immediate reports were vastly incorrect and caused a lot of unnecessary grief by reporting that nearly twice as many people had died than actually had.

In the weeks after the storm, national news media made almost daily reports. One of Dana’s many tasks was to coordinate all of the official interviews, and she spent many hours working with all kinds of organizations. At one point, Dana was working with the entire Good Morning America team:

The whole Good Morning America team was like here, in this office you know. So little Savannah, no not her, the other one.. sorry, anyway, they were just all in here like Matt

Lauer and Lester Holt, the whole team. So they're like asking me like where do we go, where do we set up? And I'm like I just got here, I don't know! I haven't left this building!

It became Dana's routine to make daily announcements to the media and she needed to be available for news sources in different time zones. She also managed all of the interviews for the police chief, the fire chief, and the mayor. All of these responsibilities meant that she barely left the office, saw her family, or slept for several weeks. Eventually she worked the process out to be extremely efficient, and while she feels more prepared for another, she lives in horror of having to go through the whole process again:

So I learned a lot, you know, trial by fire on that deal about who do you give your interviews to and which morning show trumps the other morning show, and how do you keep track of all of it cause they would just call in and be like ok so we have, Matt Lauer wants to interview so and so and so and so, and you know 6:42 we need you to call into this number and you know tons of stuff and I'm like I can't remember all this stuff!

In addition to news sources, Dana had to organize and lead visits from President Obama, Governor Fallin, and lieutenant governor Todd Lamb. Dana was honored and happy to have them all, but they required a lot of extra work for her and her team; “and then the President came, like the week.. He came on that Sunday, I think. And that was a whole new... crazy,” “so we had all the lieutenant governors from all the states and all their aides come on big huge greyhound busses and we took them on a tour and everything. It was actually very cool.”

Dana and her staff also used social media to get information out to the community. Social media proved to be a useful tool, one that had not been used often to the extent that it was for this tornado. To begin with, those who were in the storm were able to let their family and friends know all at once that they were safe. Jaime used it for that exact purpose; “we did use social

media to let people know who was ok.” Social media was also helpful in both letting people know where to get help as well as requesting help. A friend of Jaime’s was able to locate and buy a new stuffed dog that her daughter had lost after Jaime put out a request for information on where to find a similar one. Amanda used the city’s Facebook page, run by Dana’s team, to get information and then used the library’s Facebook to pass information on to others. In addition, Amanda describes how the high school band kids used social media:

All those band kids, we had I think 14 families that lost everything that were in our band and they started a Facebook page, it was just South Moore Band outreach, and those kids came over, they picked all the debris up out of the yard, they helped us move the piano, my husband had an old player piano, it was a couple hundred years old and they packed it up so lovingly and took it and stored it in the band room for us until we could figure out what to do with it.

While most will credit the vast amount of media surrounding the event with the influx of so much money and help, a few found traditional media to be a bit of a nuisance. Donna thought that they went too far:

So as far as the media they were very informative at first, and it allows people to see what happened in Oklahoma, it allows and teaches people to be prepared and ready for the future you know, whether it be a tornado or other disasters, but they really tried to keep it going and it's not necessary, in my opinion.

Jackie felt that media was incredibly helpful overall, but that they could be too pushy.

The first night I came back and looking for my car, cause first I looked on site underneath other cars and trying to figure out if it was smashed somewhere or what, and my husband was walking with me and it had been a rough couple of days. I wasn't really prepared to speak with the media. And the moment they saw you walking, you know, there was a

newspaper from New York that was a little forceful in trying to get me to speak with them. And my husband doesn't, he almost never speaks for me, cause I'm usually pretty loud myself, but he said, she's not ready to talk, you just need to back off and leave her alone. And they did, you know I think they maybe didn't know that it just wasn't a good time for me, I wasn't prepared to talk to them at that point.

Casey thought that the media gave the wrong impression about what was going on in the community. As a police officer, one of her jobs was to keep people out of dangerous areas, and a lot of residents would get angry and eventually the news became involved and starting reporting unfairly. Additionally, she thought the media misrepresented who was doing the work in the area:

As far as like the actual news sources, I don't watch the news a lot because it frustrates me. I would watch the news a little bit during this but it would just frustrate me because they would say Moore police not letting people do this, not letting people, and it's just, it's just discouraging. So I don't turn the news on. And I don't remember watching the news at all during that.

Overall, media had many benefits, especially social media. Those who have lived in Oklahoma for a long time recall how media has developed over the years since the reporting of the Murrah Building bombing in Oklahoma City in 1995, and agree that the developments have worked to better disaster relief as a whole, despite some occasional misrepresentations.

Together, the experiences of these women increase our understanding of what women face in all phases of a disaster. Examples of the inequality and vulnerability women face allows for further understanding of what needs to be improved in their lives to decrease the negative side effects. Community Capitals Framework allows for a thorough organization of the resources available to women, and can answer questions surrounding what they have access to and what they need.

Additional issues related to the media as well as community wide resilience emerged from the conversations with these woman, and should be studied further to understand their importance more thoroughly.

CHAPTER V

DISCUSSION AND CONCLUSION

The conversations with women who were impacted by the May 20th, 2013 tornado in Moore, Oklahoma revealed answers to my questions and more. Women in Moore struggled with some difficulties, such as dealing with an added work load as well as their usual task of caring for children, with evidence of a few examples of more overt forms of inequality, such as domestic violence. The women did not identify gender differences as their main difficulty towards recovery, but give examples of when they may have had a more difficult time than the men in their lives. However, this study did not examine what specific difficulties men encounter in a disaster, but considered women's experiences.

As is evident from the categorization of the Community Capitals Framework, there were a vast amount of resources lost, gained, and given by those affected by the storm. These resources as well as other life chances determined both how well the women and their families were prepared for the disaster as well as what kind of struggles they were forced to overcome. Above anything else, women believe that their role as a mother, or general caretaker, affected the whole event more strongly than anything else. Other differences in the resources women had access to meant the difference between recovering and falling deeper into poverty or vulnerability. Additionally, women reported strong feelings of connectedness to their community that made a huge difference in their decisions and recovery.

All of the women in the study lost at least some form of community capital and the level of access to other forms of capital helped determine how well they were able to recover. Access to

certain resources enabled better preparedness, such as sufficient storm cellars. Those with resources enough to find a place to stay and replace their belongings quickly were then given a boost on the road to recovery. As the process continues, the various forms of capital helped women and their families to rebuild and learn from the process. Without these resources, in any step of the process, women were at a disadvantage and had to overcome different struggles that slowed their recovery or stopped it completely.

The results of this study indicate that those women disadvantaged before the storm have the hardest time recovering afterwards. While nobody seemed to have had an easy time moving on, the effects of a lower income, inability to care for children, domestic abuse, work responsibilities, negative health outcomes, and gender roles have prevented some women from fully recovering to this day. However, there seemed to be a fairly low amount of this type of inequality, and the community as a whole has managed to get back on its feet, with some lingering effects. Overall, most respondents were fairly optimistic about their personal strength, family cohesion, and newfound coping skills.

Perhaps one of the most beneficial tactics the community seemed to have utilized was the overall protection of its vulnerable population. The area was flooded with media, and still is, meaning that most have been asked to share their story at least once, if not multiple times. Similarly, various “organizations” appeared in the area to take advantage of the crisis situation, committing various forms of fraud or other deceptive practices. In response, the organizations that have taken responsibility have not only done their best to keep these people from reaching their clients, but have provided them with legal aid, counseling, and various other protections. Done well, this tactic could be used in future disasters, not just in this community but in others like it to further ensure the well-being of all involved. Further study into whether this kind of protection occurs in technological disasters would also make for an interesting dynamic.

However, it should be noted that organizations may have protected their information not only for the sake of their clients, but for their own purposes as well. When I spoke with some of the women who were involved in the relief efforts, it was suggested that certain organizations also keep information highly confidential so that their own practices could not be easily critiqued. Considerations such as these were relevant and important, though outside the scope of this project, and future studies should consider this dynamic from the start.

The findings of this study paint a more positive picture of recovery for the community than I had initially expected based on the existing literature and my own experiences. The majority of the women I spoke with had significant difficulties but possessed enough resources to make a decent start towards recovery. However, these positive results may have been a result of the group I interviewed, rather than the characteristics of the community as a whole. Because of the way I was ultimately able to find participants, I ended up reaching a slightly more affluent group of women than I had expected. Those of lower income or other significant vulnerabilities could only be contacted through the organizations that they received assistance from, and those organizations did their best to prevent them from further harm, so contact with that population was difficult. Nonetheless, this does not necessarily mean no one else encountered negative outcomes due to women's unequal status, but that I may not have been able to speak with them. Given the demographic information of Moore, some portion of the women must have encountered more difficulties than my study showed. A more in-depth study of the area would need to be conducted with different methods intended to approach the population I was not able to speak with to really understand how well the community recovered as a whole. Additionally, this study focused on Moore alone and not the other communities that were also in the path of the tornado, so further examination of the surrounding areas would also increase the strength of the findings.

Recovering from a natural disaster is never simple, but communities can work towards increasing the resiliency of its members. Those who were not directly affected, but experienced the tornado through some other means, still have lingering effects. Still, some women found it more difficult than others because of preexisting social contexts. Knowing this, it is important to not just work to decrease inequality after a disaster, but work towards a more equitable community in the first place. By adding to women's resiliency, or their ability to adapt and respond to a disaster, the negative effects of a disaster can be decreased or avoided altogether (Fothergill 1996). For example, providing more opportunities for women to escape domestic violence effectively without losing all social ties and resources would enable recovery more quickly after a disaster. Similarly, there is little to no care for homeless women and their children in general, so women like Molly are forced to scramble to survive. Fortunately there were few women in this study who had these kinds of difficulties, and none as extreme as Molly. While this does not necessarily indicate that strong inequality does not occur, it suggests that the community has effectively protected these individuals or families from outside influences. Additionally, the possibility exists that the community as a whole was able to ensure that most of its members successfully recovered.

In his 1974 book *Frame Analysis*, Erving Goffman argues that social actors categorize social action in to "frames" that help us understand social interaction and know how to act in particular situations. These frames establish the basis for which we understand our social systems and interactions based on what is already known, and allow us to account for any deviation or misunderstanding. In this way, we have a general idea of what is occurring, how we should view the situation, and what sort of actions need to be taken. For Goffman, it was the actions that one took rather than the motives that mattered. Using this theoretical framework, disaster relief and mitigation can be understood as an established frame in which specific actions are expected.

According to the information provided by previous studies and the data introduced by the respondents, disaster response includes frames for who, when, and what kind of assistance is given. Past experience has established specific traits for those who are “victims” of a disaster and are in need of assistance, as well as if they have the necessary skills needed to get such resources; the knowledge of available relief, merit (or whether or not they “deserve” help based on the level of their loss), visibility as an impacted person, and their own level of output towards helping oneself. This frame is used to determine who is deserving of “correct” disaster response actions, and establishing who will get such assistance as needed. Fortunately, this frame is typically built for what is commonly needed based off of the many years of experience dealing with disasters such as a tornado as is evident in Oklahoma and specifically, Moore.

Unfortunately, not everyone fits into this frame. Occasionally, someone is missing some trait that fits them into the frame and makes it more difficult to receive relief. These stories, particularly about women, can tell us a great deal about the true effectiveness of our disaster response efforts. It has been established that Molly suffered a great deal, much as the result of the tornado, but lacked a certain visibility to the frame because she was restricted in giving out any personal information for fear of losing the help of a domestic violence program. Tie was also overlooked for more specific help, partly because of a lack of knowledge for how to get such assistance, but also because it was not apparent she needed further help than what her ex-husband had. On the other hand, Donna lacked a perceived merit, or deserving, of assistance because of her relatively higher financially status. While it may have seemed that Donna had more resources and did not need the assistance, she still was forced to overcome extreme financial stress in order to fully recover, and regretted not getting any assistance from disaster relief projects. Goffman’s works, and the discussion that results, should be further examined in future work to fully grasp its importance in how communities respond to a disaster. As briefly introduced here, using this

perspective could increase the value of knowledge gained after each disaster in order to improve future mitigation.

As defined by previous research, the community of Moore could be identified as a disaster subculture (Granot 1996, Engel et. al. 2014). The evidence given by the participants points to a community culture that is different from the norm of largely society in that it uniquely prepares for the recurrence of tornadoes. The culture of the city allows for permanent warning systems and organization specifically designed to respond to a tornado based on the needs of the past. This subculture enables a quick and mostly adequate response, but the negative aspects of disaster subculture are also present in Moore. For example, many individuals are often complacent to the threat, or need proof of the impending storm to actually respond. Similarly, the community may not be as well prepared to deal with other types of threats, or possibly even smaller scale tornadoes than they have prepared for. As is evident when discussing disaster frameworks, a disaster subculture also has the potential of including only those in the main body of the organization and fail to meet the needs of those with specific or special needs.

As has been established, the community of Moore did a decent job of helping the majority of its citizens, but how well did the system work for those who could not be considered to have “common” problems? Further research on that particular topic with more discussions with women outside of the average situation would help to further expand on this idea. However, it is important that disaster mitigation focus not on what is the average need, but to focus on those outside of the average in order to more adequately prepare the community as a whole. All members of the team in this particular social situation must be accounted for if the relief effort is to be considered a success. This fact has already begun to be noted by some of the actors in the relief arena; the three women working towards relief goals found that they ran up against roadblocks when they attempted to reach outside of the already established frame in order to change some aspects of said frame to be more inclusive.

Elaine Enarson suggests some techniques in her 2000 paper on gender in natural disasters that could be considered to ensure that women especially are not left out of the frame of disaster relief, thus enabling them to better recover and prepare. To begin, it is important to be aware of women's vulnerability and take steps to account for it, primarily economically (Enarson 2000). Such advice could be considered when mitigating for further disaster in Oklahoma by ensuring that all women have access to needed jobs, social connections, and economic capital to be able to prepare for any extraneous circumstances. As Enarson (2000) suggests, disaster response should also ensure that women's leadership in such disaster programs is well-established so that more affected individuals may be reached.

When asked directly if they believe that being a woman impacted how they experienced the tornado, most respondents believed that it made little difference. Several credited their being a mother as both added stress and work, but believed that men also experienced these effects, if not quite as strongly. A few also believe that they had a more difficult time psychologically than did the men in their lives, simply because they were more susceptible to emotion. In accordance with this, a few women believed they were actually better equipped to deal with the emotional aspect of the tornado because society often expects men to show little emotion. However, several made note of having particular difficulties because of being a women. Molly was very aware that the inequalities she faced made her situation incredibly difficult. Casey also struggled to balance her expectations as a professional and emergency responder with her emotions and sorrow for those most hurt by the tornado.

Being a mother or caring for children does not simply add an extra duty women must account for, but determined the level of threat they perceived as well as shaped all of the activities most of the women undertook throughout the process. Women with partners to help them care for their children still identified their children's needs as being their highest priority. Given this, it is apparent that certain considerations should be made when seeking to help women with children.

Organizations that wish to help after a tornado should consider all, but perhaps put more emphasis on assisting those women who are caring for not just themselves, but children as well.

Women's social capital remains one of the most important resources, as reported by the women who were involved in the tornado. The women report, time and time again, just how important their family, friends, and community were to their experience. Those who did not recover from the tornado effectively reported using their social connections to get some assistance. Given this, it is important to consider how women interact with others when deciding what kind of measures to take when mitigating for future disasters. While networks on social media sites or through informal connections continue to develop, it would be beneficial to look deeper into what kind of effect they have on women during a disaster.

The May 20th, 2013 tornado was an instantaneous source of uncertainty, stress, and fear. Despite this, most of the participants found hope and solace in their recovery, as well as an optimism for their future preparedness for all forms of crisis. Several women describe the moment of reunification with their entire family as a hugely beneficial experience, and that they could handle whatever comes their way because their loved ones are safe. Additionally, almost all were incredibly positive about the strength of their communities. Those who chose to stay consider how well Moore and the surrounding area has managed to pull together to do their best to fix a hopeless situation. With few exceptions, the women felt supported and strengthened by the people and community that they love.

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APPENDICES

APPENDIX A. Preliminary Interview Guide

- To start with, would you like to tell me about the day of the tornado?
 - *Specifically, what kind of immediate assistance did they get?*
 - *Did you stay at a shelter, receive any items, etc.*
- How prepared were you (your family) before the storm?
- What was your biggest immediate need?
 - *How did this need get met?*
 - *Who provided assistance in meeting that need?*
 - *What were the barriers to meeting that need?*
- In the following weeks, what did you do to recover?
 - *Clear debris, organize remaining belongings, clean, contact organizations, assist others...*
- In the following weeks, what were your greatest needs?
 - *How did this need get met?*
 - *Who provided assistance in meeting that need?*
 - *What were the barriers to meeting that need?*
- What difficulties did you encounter locating the resources you needed??
- What organizations were able to help?
- In what ways did you witness the community working together to recover?
- Did you find the assistance you received to be effective in helping you recover?
- What kinds of struggles did you have to overcome to receive the assistance you needed?
- How did being a woman impact the kind of recovery or assistance you received or barriers you faced?
- Now I would just like to ask a couple of demographic questions.
 - What is your age?
 - Approximately, what is your yearly household income?
 - What is your marital status?
 - Please tell me how many members there are in your household and their relation to you.
 - What is your occupation?

- What level of education do you have? (some high school, high school, college degree, graduate degree).

APPENDIX B. Participant Demographics

Amanda

Library Branch Manager

- 38 Years Old
- Married
- Household Income \$80,000
- Bachelor's Degree
- One Young Child
- Amanda was home sick when the tornado watch was issued, so she went and retrieved her son from his day care and sheltered in a neighbors with her child. Lost home, relocated permanently to a different neighborhood.

Casey

Police Officer

- 33 Years Old
- Married
- Household Income \$90,000
- Bachelor's Degree in Progress
- Three Children
- Casey was a rookie police officer at the time of the tornado and one of the first responders. She also worked considerable overtime in the weeks following while her husband cared for her children. Did not lose any property.

Catherine

Relief Organization

- Catherine worked for a local relief organization after the tornado. She was part of a team that organized how relief was distributed and encountered significant political struggle. Given this, she did not wish to include any more demographic information.

Daisy Nanny

- 26 Years Old
- Married
- Household Income \$50,000
- Bachelor's Degree
- No Children
- Daisy sheltered from the tornado in a bank vault in a bank that was completely destroyed. Her story centered on the experience of riding out a tornado in a vault and her subsequent media interactions. Home was fine, but lost car.

Daisy A Relief Worker

- Daisy A was part of an organization that provided relief for this tornado. Her story provided useful perspective on the politics of disaster relief. She was also new to the area, and this was the first tornado she had experienced. She also did not wish to share specific demographics.

Dana City Manager

- Dana was not actually hit by the storm personally, but as a manager of a city department, was in charge of a majority of the recovery process. She spent weeks sleeping in her office as they recovered. She describes an interesting responsibility she felt for the community and her job, as if they were part of her family and responsibility.

Day

Attorney

- 44 Years Old
- Divorced
- Household Income \$125,000
- Doctorate
- Four Children
- Day was at work in Oklahoma City during the tornado while her children were in several of the schools that were almost hit. She also did some volunteering and discusses how her children were affected and what that meant to her.

Deanna
T.

Relief Worker

- Deanna T. worked for an organization that participated in the relief effort. She has a history of working relief, including after the bombing of the Alfred P. Murrah Building in Oklahoma City in 1995. She did not wish to include demographic information because of her involvement in the local politics.

Donna

City of Moore

- 53 Years Old
- Married
- Household Income \$100,000
- High School
- One Adult Child
- Donna had severe damage to her home and lost around 100 trees from her property. The house had to be replaced and yard cleaned. She stayed at work throughout the process.

Grace

Executive Pastor

- 36 Years Old
- Married
- Household Income \$80,000
- Master's Degree
- 2 Young Children During Event, 3 Currently
- Grace left work to pick up her children and sheltered with them in a hall in one of the destroyed schools. Home was also destroyed, have since rebuilt.

Jackie

Bank Branch Manager

- 55 Years Old
- Married
- Some College
- Adult Children and Grandchildren
- Jackie was the manager at a bank that was destroyed. She was responsible for all those sheltering in their vault, as well as the rebuilding of the branch in the following years. She had damage to her home from a tornado the previous day, and lost her car.

Jaime

Librarian/National Guard

- 31 Years Old
- Married
- Household Income \$55,000
- Master's Degree
- 2 Young Children During
- Jaime was at work when the tornado hit and destroyed her home and had to locate her family immediately after. She has since rebuilt, but is struggling with significant legal problems with a corrupt builder as well as difficulties with insurance.

Layla

Retired Teacher

- 66 Years Old
- Married
- Household Income \$80,000
- Master's Degree
- Adult Children and Grandchildren
- Layla was in her last week of teaching before retirement and sheltered her students in the hallway of a school that was destroyed. She suffered minor injuries and her children were unscathed, but several other children in the school were killed. Her home was undamaged, but she suffered some long term psychological issues.

Molly

Unemployed

- 45 Years Old
- Single
- Some College
- One child during the event, but has since given her up for adoption.
- Molly was part of a domestic violence program that helped keep her and her child safe, but that required she did not give out any significant information. She had just moved into a rental house when it was destroyed by the tornado. Because of her status, she was unable to receive adequate assistance and ended up homeless. She decided to give her child up for adoption so that she could have a better life.

Natalie

Circulation Clerk

- 27 Years Old
- Engaged
- Household Income \$40,000
- Bachelor's Degree
- No Children
- Natalie's apartment was damaged and her and her Fiance were given several days notice to vacate. They had difficulty locating resources since they did not own their home and had to leave so quickly. She also had been struggling psychologically before because she was robbed at gunpoint a few months before.

Tie

Church Facilities Assistant

- 36 Years Old
- Divorced
- Household Income \$15,000
- Bachelor's Degree
- 2 Young Children
- Tie's home was significantly damaged by the tornado, and she has since divorced her husband. He controlled all their resources, so she was unable to get any kind of assistance.

VITA

Alexandra M. Holmes

Candidate for the Degree of Sociology

Master of Science

Thesis: WOMEN'S PERCEPTIONS OF DISASTER RESPONSE: A CASE STUDY
IN MOORE, OKLAHOMA

Major Field: Sociology

Biographical:

Education:

Completed the requirements for the Master of Science in Sociology at
Oklahoma State University, Stillwater, Oklahoma in May 2016.

Completed the requirements for the Bachelor of Science in Sociology at the
University of Central Oklahoma, Edmond, Oklahoma in 2014.

Experience:

Disaster Relief Coordinator for the Regional Food Bank of Oklahoma from May
2013 to June 2014